DOCUMENT RESUME

ED 468 995 SP 041 063

AUTHOR	Koppich, Julia E.; Merseth, Katherine K.
TITLE	Studies of Excellence in Teacher Education: Preparation in a Five-Year Program.
INSTITUTION	American Association of Colleges for Teacher Education, Washington, DC.; National Commission on Teaching & America's Future, New York, NY.
SPONS AGENCY	DeWitt Wallace/Reader's Digest Fund, Pleasantville, NY.
ISBN	ISBN-0-9654535-5-3
PUB DATE	2000-00-00
NOTE	97p.; Edited by Linda Darling-Hammond. For the other volumes in the series, see ED 468 432-433.
AVAILABLE FROM	AACTE Publications, 1307 New York Avenue, N.W., Suite 300, Washington, DC 20005-4701 (AACTE members $20.95; nonmembers $25.95). Tel: 202-293-2450; Fax: 202-457-8095; Web site: http://www.aacte.org.
PUB TYPE	Reports - Research (143)
EDRS PRICE	EDRS Price MF01/PC04 Plus Postage.
DESCRIPTORS	Beginning Teacher Induction; Case Studies; College Faculty; Educational Change; Elementary Secondary Education; English Instruction; Excellence in Education; Extended Teacher Education Programs; Higher Education; Mathematics Education; Mentors; *Preservice Teacher Education; Professional Development Schools; *Program Effectiveness; Student Teachers; Teacher Role
IDENTIFIERS	Learner Centered Instruction; Program Characteristics; Trinity University TX; University of Virginia

ABSTRACT

This book presents case studies of two highly successful teacher education programs. It is part of a three-volume series that includes seven case studies. It documents the goals, strategies, content, and processes of teacher education programs that are widely acknowledged as exemplars for preparing prospective teachers to engage in skillful, learner-centered practice. Using observations, interviews, and surveys, researchers examined all aspects of each program of study and clinical practice. The book documents the capabilities of prospective teachers who graduate from these programs by examining the teachers' own work during teacher education and in the field, interviews with faculty and administrators in the schools where graduates teach, and surveys of principals. The book also examines what policies, organizational features, resources, and relationships have enabled these programs to succeed. Features common to the programs include a clear, shared vision of good teaching; well-defined standards of practice and performance; extended clinical experiences; and extensive use of case study, teacher research, performance assessment, and portfolio evaluation. The two case studies are "Trinity University: Preparing Teachers for Tomorrow's Schools" (Julia E. Koppich) and "Teacher Education at the University of Virginia: A Study of English and Mathematics Preparation" (Kathleen K. Merseth and Julia E. Koppich). (Papers contains references.) (SM)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 468 995

Studies of Excellence in Teacher Education: Preparation in a Five-Year Program

Julia E. Koppich and Katherine K. Merseth

AACTE
2000

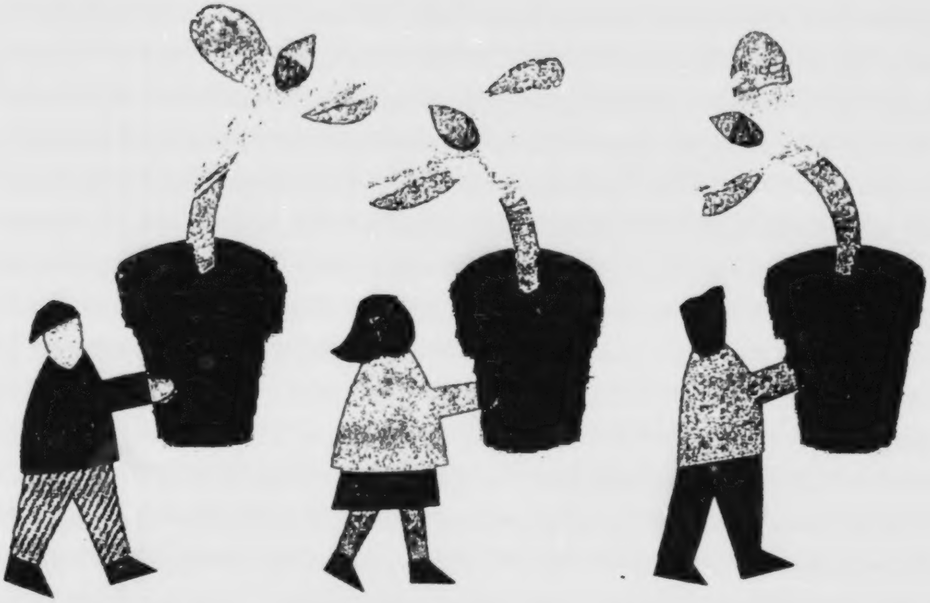
U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
C. H. Simon
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
1

SP 041 063

BEST COPY AVAILABLE

STUDIES OF EXCELLENCE IN TEACHER EDUCATION



PREPARATION IN A *five-year program*

TRINITY UNIVERSITY
BY JULIA E. KOPPICH

UNIVERSITY OF VIRGINIA
BY KATHERINE K. MERSETH AND JULIA E. KOPPICH

Linda Darling-Hammond, Editor

BEST COPY AVAILABLE

STUDIES OF EXCELLENCE IN TEACHER EDUCATION

PREPARATION IN A *five-year program*

TRINITY UNIVERSITY
BY JULIA E. KOPPICH

UNIVERSITY OF VIRGINIA
BY KATHERINE K. MERSETH AND JULIA E. KOPPICH

Linda Darling-Hammond, Editor

The American Association of Colleges for Teacher Education is a national, voluntary association of colleges and universities with undergraduate or graduate programs to prepare professional educators. The Association supports programs in data gathering, equity, leadership development, networking policy analysis, professional issues, and scholarship.

The opinions, conclusions, and recommendations expressed in this monograph do not necessarily reflect the views or opinions of the American Association of Colleges for Teacher Education. The AACTE does not endorse or warrant this information. The AACTE is publishing this document to stimulate discussion, study, and experimentation among educators. The reader must evaluate this information in light of the unique circumstances of any particular situation and must determine independently the applicability of this information thereto.

Studies in Excellence in Teacher Education: Preparation in a Five-Year Program may be ordered from:

AACTE
AMERICAN ASSOCIATION OF COLLEGES FOR TEACHER EDUCATION

AACTE Publications
1307 New York Avenue, NW, Suite 300
Washington, DC 20005-4701
Tel: 202/293-2450
Fax: 202/457-8095
Web site: www.aacte.org
Single copy: $20.95 AACTE members/$25.95 nonmembers

This three-volume series also includes:
Studies in Excellence in Teacher Education: Preparation in the Undergraduate Years
Studies in Excellence in Teacher Education: Preparation at the Graduate Level

National Commission
on Teaching & America's Future

The National Commission on Teaching and America's Future, initiated in 1994, was created to identify the implications for teaching embodied in current school reforms; to examine what steps need to be taken to guarantee all children access to skilled, knowledgeable, and committed teachers; and to develop a comprehensive policy blueprint for high educational performance. The Commission's work has been supported by grants from the AT&T Foundation; BellSouth Foundation; Carnegie Corporation of New York; the DeWitt Wallace - Reader's Digest Fund; the Ford Foundation; the Philip Morris Companies Inc.; the Rockefeller Foundation; the US Department of Education's Office of Educational Research and Improvement; and the William R. Kenan Jr. Charitable Trust.

Grateful acknowledgment is made to the DeWitt Wallace - Reader's Digest Fund for support of this publication.

© 2000 by National Commission on Teaching & America's Future, New York, New York. All rights reserved. Printed in the United States of America.

ISBN No: 0-9654535-5-3

TABLE OF CONTENTS

Foreword v

Trinity University: Preparing Teachers for Tomorrow's Schools 1
Introduction 2
The University Context 3
Teacher Education Program Reform at Trinity 4
Trinity's Professional Development Schools 12
Mentors and Mentoring 18
Reshaping the Role of University Faculty 20
The First Year: Gentle Induction 23
Year Two: Beginning to Link Theory and Practice 26
Completing the Undergraduate Years 29
The Fifth-Year Program 31
Life After Trinity 37
Distinguishing Characteristics of Trinity's Program 40
Final Words 44
References 45
Appendix A: Methodology 47
Appendix B: Course Sequence 48

Teacher Education at the University of Virginia: A Study of English and Mathematics Preparation 49
Introduction 50
Perceptions of the BA/MT Program 55
References 80
Appendix: Methodology 81

About the Authors 82
About the Editor 83

FOREWORD

by Linda Darling-Hammond

This set of case studies about extraordinary teacher education programs is one of three volumes being published by the American Association of Colleges for Teacher Education in collaboration with the National Commission on Teaching & America's Future. A cross-cutting analysis of the cases, published separately, will describe the common features of these seven programs that are distinguished by their success in preparing teachers to practice in ways that we describe as both *learner-centered* and *learning-centered.* By this, we mean that they prepare teacher to meet the needs of very diverse learners—to teach in ways that are responsive to individual students' intelligences, talents, cultural and linguistic backgrounds, needs, and interests; and they prepare teachers to teach for understanding—to teach in ways that support active, in-depth learning which results in powerful thinking and flexible, proficient performances on the part of their students.

These abilities are the foundation of new standards developed by the National Board for Professional Teaching Standards (NBPTS), the Interstate New Teacher Assessment and Support Consortium (INTASC), and the National Council for Accreditation of Teacher Education (NCATE), along with professional associations engaged in developing new standards for students. However, while there is increasing consensus on what teachers and their students need to know and be able to do in order to meet the more ambitious goals of 21st century schools, there is not yet a well-developed knowledge base about how to prepare teachers to do these things. Although teacher education has been much critiqued, little research has been done to examine the kinds of learning experiences that help beginning teachers acquire the knowledge and skills that underlie learner-centered and learning-centered practice.

That teacher knowledge is central to this mission is a new concept in 20th century school reform. After decades of trying to fix schools by changing curriculum packages, texts, tests, and management systems, most reformers now agree that deepening teachers' knowledge and skills is critical to the success of ongoing efforts to reform American education. Only very knowledgeable and skillful teachers who are able to respond differentially and appropriately to students' interests and needs can enable diverse learners to succeed at much more challenging learning goals. These goals include helping students learn to master ambitious subject matter content and to think critically, create, and solve complex problems, rather than merely to perform rote tasks. And teachers are being asked to achieve these goals for *all* children, not just the 10 to 20 percent who have traditionally been siphoned off into programs for the gifted and talented or "honors" track. Furthermore, students are more diverse in their needs and backgrounds and less supported in their communities than in the past. So schools are being asked to take achieve higher goals for a broader group of students with greater learning needs than ever before.

This collection of case studies seeks to answer a question that has not yet been yet addressed by reformers: How can we prepare teachers for this daunting mission? The study, conducted under the auspices of the National Commission on Teaching & America's Future at Teachers College, Columbia University, reports how seven teacher education programs have been able to prepare teachers to succeed at the kind of highly demanding practice described above, and thus to create substantially more successful and powerful learning experiences for students. It provides evidence about the outcomes of the programs as well as the content they engage and the processes they employ. The goal of this work is to provide greater knowledge that others in the field can build upon—knowledge that will help us understand what successful teacher education models look like, what they aim for, what they do, and what their students can accomplish as a result.

One motivation for this study was to counteract the widely shared set of myths about teaching and teacher education. Among others, these myths include the following: that good teachers are born and not made; that good practice cannot really be taught—it can only be intuited through trial and error; that few can ever really master complex teaching practices or attend to the needs of individual learners (thus, teacher-proof curricula should be continued targets of educational investment); that there are no worthwhile teacher education programs anyway so the whole process of preparing teachers should be abandoned. These myths, despite their lack of grounding, drive much policy work and deflect attention from needed investments in high quality preparation for teachers.

To provide evidence about alternatives, we set out to look at teacher education programs that are so noticeably good at what they do that the distinctive practice of their graduates is obvious as soon as an observer sets foot in the classroom. This phenomenon is one that I have noticed over the years of my work in schools and teaching. In my years in New York, for example, I could almost invariably identify the graduates of preservice programs like those of Bank Street and Teachers College, Columbia by seeing them teach and hearing them discuss their practice. Like the graduates of other programs that we discovered by asking practitioners in other parts of the country, these teachers' knowledge of curriculum and assessment, their focus on and understanding of individual students, and their capacity to use sophisticated teaching strategies for engaging diverse learners were immediately evident. Furthermore, I found that in many parts of the country I could find a high degree of consensus among principals, superintendents, and teachers who operated schools that were extraordinarily successful with diverse learners about where they liked to hire their teachers. These excellent practitioners agreed on a very short list of colleges in their vicinity (often only one or two) that they believe prepare teachers from their very first moments on the job to shape powerful learning experiences for their students and to understand their students' learning and how to support it very, very well.

The seven programs in this study are by no means the only ones that fit these criteria and the more formal parameters we ultimately used in developing the sample. The programs were selected from a much longer list of candidates because they represent elementary and secondary programs in public and private institutions serving different kinds of clientele in different parts of the country. The programs were selected through an extensive review of evidence, including national reputational sampling from researchers, expert practitioners, and scholars of teacher education; local evidence from employers about who they prefer to hire and why; and evidence of outcomes from prior surveys of program graduates. To these data about program outcomes, we added as part of the study a comparison survey of recent program graduates and a national random sample of beginning teachers about their preparation and practices; a survey of the principals of program graduates about their views of the program graduates' abilities and practice in comparison with those of other programs; and observations of graduates' classroom practice after graduation.

The sample institutions use very different models of preparation, some are undergraduate while others are postbaccalaureate or five year (combined undergraduate and graduate); some have created professional development school relationships while others organize student teaching in more traditional ways; some use cohort models while others do not; some attract current or recent college students while others attract mid-career recruits to teaching. Thus, together they represent the gamut of possibilities for teacher education currently found in the field:

- Bank Street College in New York City offers a graduate school program that is known for its long-standing commitments to progressive, democratic practice and has the Bank Street School for Children as an on-site lab school. We examined the programs for preparing elementary and middle school teachers.

- The University of California at Berkeley's Developmental Teacher Education Program is a two-year graduate school model of early childhood education that is strongly focused on the application of developmental psychology to teaching.

- University of Southern Maine's Extended Teacher Education Program (ETEP) is a one-year graduate school model that is substantially school-based. Almost all fieldwork and much coursework for both the elementary and secondary teacher education programs takes place in schools that are professional development school partners with the university.

- Wheelock College in Boston, Massachusetts is known for progressive early childhood education, much like Bank Street. We examined the undergraduate early childhood education program that is also a pathway to a master's degree program required of all teachers in Massachusetts before they receive a career teaching license.

- Alverno College in Milwaukee, Wisconsin is an undergraduate model that organizes its work around a sophisticated performance assessment strategy tied to its ability-based curriculum. We examined the elementary teacher education program that works in strong collaboration with Milwaukee Public Schools.

- Trinity University in San Antonio, Texas operates a five-year model that

BEST COPY AVAILABLE

extends from undergraduate through graduate school in a blended program that awards both a disciplinary bachelor's and a Master's in Education for both elementary and secondary candidates. Trinity adopted the major recommendations of the Holmes Group and has organized all of its field work around professional development schools.

- University of Virginia in Charlottesville, Virginia is a five-year dual degree program like Trinity's that does not rely upon professional development schools. We examined the secondary education programs in English and mathematics. These programs provide insights into the preparation of high school teachers, an area that we found was problematic nationwide.

The study does three things: First, it documents the goals, strategies, content, and processes of teacher education programs that are widely acknowledged as exemplars for preparing prospective teachers to engage in skillful, learner-centered practice. Using a standard set of observation and interview protocols, as well as survey instruments, a team of researchers examined all aspects of the program of study and clinical practice engaged in by students—by surveying graduates and their employers; shadowing and interviewing students; visiting classes, seminars, professional development school sites, collecting record data (syllabi, assignments, student work, program descriptions, and statistics) and observing and interviewing university-based and school-based faculty about the intentions, processes, and outcomes of their work.

Second, the study documents the capabilities of the prospective teachers who graduate from these programs. This is done through examination of the teachers' own work during teacher education and in the field (direct observations as well as artifacts of practice: portfolios, exhibitions, lesson plans, assignments, and samples of their own students' work); interviews with faculty and administrators in the schools where graduates teach; surveys of principals comparing the knowledge and skills of these candidates to others whom they have hired; and record data from other surveys and accreditation reviews. Finally, the study examines what policies, organizational features, resources and relationships have enabled these programs to be successful, taking into account the university and state policy contexts within which these programs exist.

We sought to study a diverse set of programs because we believe the findings will be more robust and useful if they characterize important features of successful programs that exist in a wide range of contexts with which other schools can identify. The goal of the study is not to suggest a single cookie-cutter approach to preparing teachers, but to understand the core features of a range of programs that make a difference for preparing teachers who understand their students and who can teach in ways that develop deep understanding and high levels of competence. While they conceptualize and conduct their work in different ways, these programs do have many common features. Among them are the following:

- a common, clear vision of good teaching that is apparent in all coursework and clinical experiences;

- well-defined standards of practice and performance that are used to guide and evaluate coursework and clinical work;

- a curriculum grounded in substantial knowledge of child and adolescent development, learning theory, cognition, motivation, and subject matter pedagogy, taught in the context of practice;

- extended clinical experiences (at least 30 weeks) which are carefully chosen to support the ideas and practices presented in simultaneous, closely interwoven coursework;

- strong relationships, common knowledge, and shared beliefs among school- and university-based faculty; and

- extensive use of case study methods, teacher research, performance assessments, and portfolio evaluation to ensure that learning is applied to real problems of practice.

These features and others help these programs productively confront many of the core dilemmas of teacher education: the strong influence of the "apprenticeship of observation" candidates bring with them from their years as students in elementary and secondary schools; the presumed divide between theory and practice; the potential limitations of personal and cultural perspectives each person brings to the task of teaching; the difficulty of teaching people how to enact their intentions in complex settings for practice; and many more.

We hope that readers find the case studies to be generative for their own research, thinking, and practical efforts with regard to the education of teachers. If the illustrations provided here spark an idea or an initiative that enables teachers to learn more productively how to teach more powerfully, our work will have been well rewarded.

Linda Darling-Hammond
Provence, July 7, 1999

Note: The research team was led by Linda Darling-Hammond, then William F. Russell Professor of Education at Teachers College, Columbia University and currently Charles E. Ducommun Professor of Teaching and Teacher Education at Stanford University. It included Julia Koppich, President of Julia E. Koppich and Associates, an education consulting firm; Maritza B. Macdonald, Senior Research Associate, National Center for Restructuring Education, Schools, and Teaching, Teachers College, Columbia University; Kay Merseth, Executive Director of the Harvard Project on Schooling and Children at Harvard University; Lynne Miller, Professor and Director of the Southern Maine Partnership at the University of Southern Maine; Gordon Ruscoe, Professor in the Foundations of Education at the University of Louisville; David Silvernail, Professor and Director of the Center for Educational Policy, Applied Research and Evaluation at the University of Southern Maine; Jon Snyder, Associate Professor and Director of Teacher Education at the University of California at Santa Barbara; Betty Lou Whitford, Professor of Education and Director of the National Center for Restructuring Education, Schools, and Teaching at Teachers College, Columbia University; and Kenneth Zeichner, Hoefs Bascom Professor of Teacher Education at the University of Wisconsin-Madison.

Trinity University: Preparing Teachers for Tomorrow's Schools

BY JULIA E. KOPPICH

When I hire a Trinity graduate, I know [he or she] will become a school leader. These people are smart about curriculum; they're innovative. They have the torch.

Chula Boyle, Principal,
International School of the Americas

I'd grab all the Trinity graduates for jobs [if I could]. They have both a depth of content knowledge and the ability to continue to learn.

Diana Lam, Superintendent,
San Antonio Independent School District

INTRODUCTION

This is a story about Trinity University, a small, private, liberal arts college on the banks of Texas' San Antonio River. More specifically, this is a story about Trinity's lighthouse teacher education program.

Trinity's program has been a decade in the making—and is still considered by its creators to be a work in progress. The program was born, in part, out of political controversy and policy frustration. Mostly, however, the university's program is the product of hard work and tough-minded thinking by a group of dedicated professionals—university faculty, experienced classroom teachers, and school administrators—who made the decision, long before such thinking was fashionable, to look hard at the unexamined tradition that surrounded teacher preparation at Trinity.

The result of their deliberations is a teacher education program that successfully combines academic rigor with the development of practical and innovative classroom skills in a five-year program culminating in a Master of Arts in Teaching. Trinity also offers a one-year postbaccalaureate teacher preparation program, but that is not the focus of this case study. Seventy-five percent of Trinity's teachers-to-be participate in the five-year program. Teacher education at Trinity offers students a creative blend of academic course work in a range of subjects, a thoughtful series of rigorous university-based professional preparation classes, and multiple structured "real school" opportunities in Professional Development School settings. It is a program grounded in a coherent vision of teacher education, anchored by a network of cooperative university-school partnerships, and aimed at producing teachers who will act, throughout their careers, as education change agents.

The specifics of the Trinity program include:

- A required Bachelor's degree in humanities for prospective elementary teachers and in one or more academic disciplines for secondary teaching candidates;
- Undergraduate education course work in areas such as child and adolescent development, education reform and policy, and schools and the community;
- A minimum of 135 hours in Professional Development School settings during the undergraduate years;
- Graduate level course work which continues to emphasize the connection between theory and practice; and

- A year-long postgraduate (fifth year) internship in a Professional Development School under the tutelage of PDS mentors who serve as Trinity clinical faculty.

Today, Trinity's five-year accepts approximately 50 prospective teachers each year and offers preparation for certification both in elementary education and in 24 discrete secondary education areas. Students can also earn license endorsement in special education and in English as a Second Language.

How did Trinity's teacher education program develop? What are its roots? What is the program's structure, and what are its results? These are the questions this case study explores. We begin with a brief description of the university context for teacher preparation at Trinity.

THE UNIVERSITY CONTEXT

Trinity University is a 127-year-old private liberal arts college located in San Antonio, Texas. Though its name implies religious roots, Trinity, which was founded by Texas Presbyterians, actually represents the post-Civil War amalgamation of three smaller Texas colleges.

The university has achieved some recent national renown. It was featured in a 1990 *U.S. News and World Report* survey as the preeminent professional degree-granting university for the western region of the United States and has been ranked, each year since 1994, as the number one regional university (for the West) in *U.S. News and World Report's* "Rankings of America's Best Colleges."

Situated on a bucolic 117-acre college campus on the north side of the nation's tenth largest city, Trinity prides itself on being a budding Ivy League-quality institution. The school enrolls 2,300 undergraduates and 300 graduate students. Academic standards are high. Enrolling undergraduates' average SAT score is 1205. Two-thirds of entering freshmen (67%) typically have placed in the top 10 percent of their graduating classes.

Trinity also has made an all-out effort in the last decade to recruit top-notch faculty in a wide variety of academic areas. The 224 full-time faculty members, many of whom have achieved national distinction in their fields, are selected for their commitment to both scholarship and teaching.

Spiraling endowments have enabled Trinity, in recent years, to invest in its infrastructure. The school has increased library space; added state-of-the-art science facilities, including new chemistry laboratories, a high-powered physics laser laboratory, and image-analysis facilities in geology and biology; expanded its performing arts facilities with a 320-seat concert hall and three theaters; and created a communications facility that houses television production services and a 3,000-watt radio station that broadcasts jazz and classical music throughout greater San Antonio.

Education at Trinity is an expensive undertaking, with annual costs (including room and board) averaging more than $19,000 in 1996. New financial endowments have made it possible for Trinity to increase its financial aid to undergraduates dramatically and thus reach out to less affluent students. The vast majority of Trinity students (80%) now come to the university from public high schools, mostly in Texas or the general southwestern region of the United States. Nearly 20 percent of the student body is composed of racial and ethnic minorities.

All of this—national recognition for scholarly excellence, recruitment of nationally known faculty, a more academically able and more diverse student body—represents quite a turnaround for a school that once had the reputation as being the educational playground for the children of Texas' rich.

TEACHER EDUCATION PROGRAM REFORM AT TRINITY

In 1985, Trinity's teacher education program looked quite conventional by any national yardstick: Admission standards were relatively low; the education major predominated; and field experiences consisted of the classic eight-week student teaching arrangement in traditional public schools.

The years 1986 to 1987 marked a watershed period for teacher education at Trinity. A series of activities and events—some planned, others serendipitous—served alternately as catalysts and springboards for the Trinity turnaround. By the end of 1987, Trinity would abandon the elementary education major in favor of a humanities degree, would have developed the architecture for its new five-year teacher education program, and would have in place a fledgling network of Professional Development Schools. It was a heady couple of years.

From Elementary Education to Humanities Major

By the mid-1980s, Trinity Education Department faculty had developed a nagging sense of unease about the education major for elementary

BEST COPY AVAILABLE

teachers. Secondary teacher candidates, then and now, major in the academic subject or subjects they will teach. Education course work might prepare elementary school teachers-to-be with the requisite classroom skills they would need, but these courses did little to ensure that teachers were secure in the actual subjects—mathematics, reading, science, and history—that they would be required to teach. By 1986 a humanities major, providing both academic focus and a breadth of course offerings, was discussed widely as the appropriate solution to this dilemma.

Led by the (then and now) education department chair, Professor John Moore, the widely acknowledged "father" of Trinity's teacher preparation transformation, the university sought, and received in 1986, a grant from the National Endowment for the Humanities, expressly for the purpose of developing a new academic major for elementary educators. A university committee, chaired by the dean of behavioral and administrative studies and composed of faculty members from humanities disciplines and the department of education, was designated to undertake this task.

In order to make sure that the humanities major would be appropriate to the needs of elementary educators, each university faculty member serving on the committee was required to visit elementary schools for a first-hand view of students, teaching, and curriculum. As an additional crucial "reality check," 10 classroom teachers from San Antonio-area schools were added as participants to the committee's deliberations. The work of this group provided the framework for the university's new humanities major, which, since the late 1980s, has replaced the education major for all of Trinity's prospective elementary teachers.

Fortuitously, at the same time as the humanities major was being developed, Trinity was in the midst of a university-wide curriculum reform effort. That work resulted in a new common curriculum for all Trinity students which includes:

- A first-year seminar program (the topics of which change each year);
- A writing workshop;
- Development of foreign language, computer, and mathematical skills;
- Lifetime sports/fitness education; and,
- Courses built around study in six substantive areas, what the university calls "six fundamental understandings:"
  1) Understanding the Intellectual Heritage of Western Culture (9 hours),
  2) Understanding Other Cultures (3 hours),

3) Understanding the Role of Values (3 hours),
4) Understanding the World Through Science (7-9 hours),
5) Understanding the Human Social Context (9 hours), and
6) Understanding the Aesthetic Experience (3 hours).

The humanities major for education undergraduates fits neatly under the umbrella of the university's liberal arts requirements. Humanities at Trinity is structured around three strands of study: 1) Discovery and Innovation, which includes courses in art, sociolinguistics, mythology, world civilizations, music, religion, and comparative literature; 2) the City and Modern Life, encompassing classes in language, culture, society, art, literature, philosophy, sociology, and religion; and 3) Laws and Values, which spans politics, issues of law and justice, ethics, legal theory, and value conflicts in history.

Students select courses, all of which are offered by the university's academic departments, from an extensive list of offerings. Many students specialize in a particular field, often achieving academic majors or minors in history, religion, or philosophy in addition to completing the general requirements for the humanities major.

An examination of the four-year transcript of a "typical" Trinity humanities major reveals, in addition to the required education courses, the following:

- Thirteen courses in the social sciences and related fields, including history (American, European, and Asian), government, economics, philosophy, and religion;
- Eight science or science-related courses, including geology, anthropology, archaeology, and environmental science;
- Four English courses, including the Writing Workshop, and a course each in the British Masters, American Masters, and Shakespeare; and
- Two mathematics courses, including calculus.

The four years are rounded out by required (for teachers-to-be) education courses (which are described in some detail in another section of this case study), as well as by various courses in art, music, dance, and computers. Humanities majors receive as deep and broad an academic experience as do any other Trinity students. In effect, their education courses serve as an additional area of academic concentration to be further extended in the fifth year Master's program.

A firm grounding in academic content is a critical component of the Trinity teacher education foundation. The program hews to the belief that teachers must be well-versed in the subjects they will teach, so that they can concentrate their field work on learning the art of teaching. Beyond the initial years of professional practice, the academic foundation provides graduates with a focus for their own lifelong learning.

The Education Society, an energetic group of undergraduate teacher education students, assists in organizing the humanities major and serves as liaison between students and faculty. Members of the Education Society provide advice and counsel to their peers seeking the proper complement of courses, offer the benefits of their own experiences, and make suggestions to faculty regarding areas for consideration regarding increasing or decreasing requirements or ways to enhance students' learning experiences.

Focusing on an academic major for both elementary and secondary teachers, then, was the first component of revamping teacher preparation at Trinity.

The Next Phase of Reform

The next series of reforms—creating the five-year program, rethinking the content and sequence of university-based education course work, and developing opportunities for novice and experienced teachers in Professional Development Schools—would soon follow.

In the mid-1980s in Texas, as in many other states, debates about education reform were moving into high gear. Responding to the 1983 declaration by the National Commission on Excellence in Education that a "rising tide of mediocrity" was gripping the nation's schools, hundreds of state and local-level education commissions were operating throughout the nation. Texas had its own high visibility blue-ribbon commission whose efforts would catapult education reform to the top of the state's political agenda. The work of the commission would also give rise to the Brackenridge Forum for the Advancement of Teaching. An unwitting catalyst was Ross Perot.

Education Reform Takes Center Stage

Long before he harbored, or at least expressed, national political ambitions, Ross Perot was a voluble activist in Texas school reform. In 1983, the state's governor, Mark White, appointed Perot, a self-made billionaire (who, ironically, was a staunch supporter of White's opponent in the

1982 governor's race) to head SCOPE, the Select Committee on Public Education. The Legislature's charge to SCOPE was broad and sweeping—"to study the issues and continuing concerns related to public education in Texas" (Toch, 1991).

Perot knew little about the state's K-12 system, except that he was dissatisfied with it. He publicly denounced Texas schools as "places dedicated to play" (Toch, 1991) rather than to study and academics. He took on teachers, administrators, the unions, local school boards, and, most of all, the Texas State Board of Education, which he declared to be ". . . a political tool for the educational establishment" (Toch, 1991).

Perot was serious about his work with SCOPE and dedicated to overhauling the state's education system. He also had very firm ideas about how change should be brought about. Under Perot's chairmanship, SCOPE produced a report containing no fewer than 140 recommendations, some broad, some minutely detailed.

Schools would be accredited differently, principals appointed differently, and textbooks selected differently. Inter-district school finance would be equalized. Extracurricular activities would be banned from the school day. Class sizes in the early grades would be reduced. The school day and school year would be lengthened. The elected state school board would be replaced by one appointed by the governor. Students would be required to take annual standardized minimum competency tests. A teacher career ladder, including pay for performance, would be established. All teachers, including those already serving in teaching positions, would be required to pass a literacy test. The list of recommendations continued for pages. Virtually no area of education, from governance to finance to curriculum to teaching, remained untouched.

Despite Texas-sized political wrangling, the Educational Opportunity Act of 1984 (HB 72) bore a striking resemblance to the SCOPE report (Toch, 1991). House Bill 72 included:

- School finance equalization;
- A test of minimum literacy skills for all teachers. (This provision created quite a furor, as practicing teachers were subject to the test. Nearly all of the state's teachers passed the exam, causing some to question its level of difficulty.)
- A "no pass, no play" statement requiring students to achieve a passing grade of 70 in order to be eligible to participate in athletic programs;

- Standardized testing for students in reading, writing, and mathematics in grades one, three, five, seven, and nine, and in language skills and math in grade 12;
- State-mandated minimum hours and days of teaching;
- A new scope and sequence curriculum, called "learning essentials";
- A teacher career ladder with pay for performance;
- A limit on the number of "excused" student absences;
- A requirement that schools of education submit annual performance reports indicating the number of their graduates who had passed the state licensing exam; and,
- A new state board, appointed by the governor.

Intensification Prevails

Like much of the legislation of the "first wave" of education reform, which occurred generally in the period from 1983 to 1987, Texas' statute might best be characterized as "intensification." Regulatory and prescriptive, it was organized around the theory that, if schools continue essentially to do what they have always done, but do it faster, harder, and under stricter state scrutiny, education will improve.

The Texas reform measure produced considerable consternation on the part of Trinity Education Department chair John Moore and his new colleague, Thomas Sergiovanni. Sergiovanni, a nationally known education researcher and scholar, had been wooed to Trinity from the University of Illinois, Champaign-Urbana by Moore in 1984. The two believed that the Texas law, with its emphasis on top-down reform and minimum competencies for teachers and students, failed to capture either the subtleties or complexities of schooling. The law treated all schools as if they were cut from the same mold and ignored the role teachers' professional knowledge and skills play in successful education.

Moore and Sergiovanni first thought they would simply write a rebuttal to House Bill 72. Instead, they devised a plan that would have longer term and far more sweeping consequences.

The Brackenridge Forum For the Advancement of Teaching

With funding from the San Antonio-based Brackenridge Foundation, Moore and his colleagues established the Brackenridge Forum for the Advancement of Teaching. The Forum brought together Trinity faculty, some of the best national thinkers on education reform, including Ernest Boyer, President of the Carnegie Foundation for the Advancement of Teaching; Arthur Wise, then Director of the Center for the Study of the Teaching Profession at the Rand Corporation; and Theodore Sizer of the Coalition of Essential Schools, and elementary and secondary classroom teachers from San Antonio-area public schools.

The deliberations of the forum resulted in the report: *Teachers Speak: Quality Schooling for Texas Today and Tomorrow.* Written principally by the Forum's classroom teacher members, this 1987 report expressed educators' frustration with Texas policy makers' acceptance of the "factory model" of schooling in which state prescriptions and standardization predominate. "It is time," declared the report, "to reshape the reform movement, to redirect it so that it reflects the understanding, the insight, and the vision of the professional classroom teacher."

The report's authors sought to create a new vision for Texas education, a system in which schools are "centers of learning concerned with inquiry and mastery," where teachers and administrators work as colleagues, teacher expertise is valued, teaching is tailored to students' individual needs, parents are partners with educators, and accountability is genuine. "The primary purpose of schooling," said the report, "is not training, but the development of human potential. [We must] produce . . . students who understand important concepts, possess useful skills, and have a sense of discovery about their own education."

Teachers Speak portrayed teaching as "a lifelong commitment and a lifelong learning process." It underscored the continuous and developmental nature of the teaching career and focused on the critical need for teachers to assume leadership roles in preparing new colleagues for the profession. The underlying premise of the report was that if teaching is transformed, student achievement can be as well.

The Brackenridge Forum report extended a set of challenges—*to colleges, universities, foundations, and the business community* to support a network of forums across Texas to continue the conversation about enhancing teaching; *to the State* to deregulate schooling and teaching in order to promote new ideas and initiatives; *to school administrators* to become partners with teachers in building a new educational enterprise; and *to teachers* to take more responsibility for their profession and for the quality of schooling.

The ambitious Forum agenda, which would shape Trinity's work for the next two years, included:

- identifying and recruiting able high school students for careers in teaching;
- restructuring teacher education, with special emphasis on admission standards, a five-year program featuring the clinical model, and more effective partnerships with public school practitioners at newly fashioned Professional Development School sites; and,
- restructuring schools and teaching with a focus on the role and function of the classroom teacher and the enhancement of learning for all students.

The Brackenridge report prefigured other teacher education reform efforts, including the work of the Holmes Group. Trinity was asked to join the Holmes Group precisely because of the university's early work in establishing a five-year program of teacher education and a network of Professional Development Schools. The activities of the Forum also served an essential constituency-building purpose. Trinity's newly emerging teacher preparation program would have a ready cadre of supporters among a number of teachers, university officials and faculty, and nationally-known education reform experts, all of whom were present at the creation.

The Brackenridge Forum Revisited

Moore and Sergiovanni continued the research and conversation. They studied the preparation programs of other professions, including law and medicine, and talked with people involved in these efforts in order to have a secure grasp of what teacher education might learn from other disciplines. Moore then reconvened a subset of the Brackenridge Forum.

Classroom teachers were again deeply involved with university faculty in this undertaking. Conversations revolved around the kinds of graduated experiences teachers-to-be might find most beneficial and in what types of settings these ought to occur; the nature of on-going university-school relationships; and the form the university's commitment to a new kind of teacher education and, indeed, to a new vision of the teaching career, might take. From these discussions, Trinity's five-year teacher education program slowly emerged.

With continuing support from the Brackenridge Foundation, the Brackenridge Interns in Teaching Program was established in the late 1980s. This program provided Trinity with financial support to recruit for the teacher education program from the top five to 10 percent of high school graduates and from Trinity's freshman class. While many students come to Trinity knowing, as freshman, they want to enter the teacher education program, others do not make this decision until their sophomore or junior years. (Formal admission to the MAT program does not occur until the junior year.) The Brackenridge Intern Program laid the foundation for Trinity's ongoing commitment to recruit potential teachers from the best and brightest.

Four San Antonio-area schools—Hawthorne and Jackson-Keller Elementary, Mark Twain Middle School, and Lee High School—were brought together under John Moore's leadership to become the Alliance for Better Schools, Trinity's initial network of Professional Development Schools. For a time, Cambridge Elementary was a Trinity PDS, but is not currently. The International School of the Americas has been added as a PDS. (For a time, Cambridge Elementary was a Trinity PDS but is not currently.) These schools would serve as learning laboratories for children and adults. Created using the Holmes Group Professional Development School characteristics as their organizing rubric, each school models innovative teaching strategies, cooperative faculty relationships, strong university links, intensive efforts to induct teachers-in-training into the profession, and ongoing professional development for experienced and novice teachers alike.

TRINITY'S PROFESSIONAL DEVELOPMENT SCHOOLS

The Holmes Group's 1990 report, *Tomorrow's Schools: Principles for the Design of Professional Development Schools,* defines a Professional Development School as "... a school for the development of novice professionals, for the continuing development of experienced professionals, and for the research and development of the teaching profession." This is the model on which the Trinity PDSs are based. Located in two of metropolitan San Antonio's 16 independent school districts—the San Antonio Independent School District and the Northeast Independent School District—each of the Trinity PDSs is a community dedicated to what Moore calls the "career continuum"—recruitment, preparation, and retention.

In 1992, Trinity organized Smart Schools for San Antonio's Future, a consortium of schools and school leaders. The PDSs play pivotal roles in this combine, whose purpose is to provide an arena in which schools can develop and implement school improvement projects. By 1995-96, a total of 96 San Antonio schools were members of the Smart Schools network.

The name "Smart Schools" is a play on smart machines, computers and the like, which can take new information and adapt. Smart Schools are themselves adaptable, constantly on the lookout for new ideas and new resources that can contribute to better educational programs. The Smart Schools motto is, "What is now the exception must become the rule." The operating credo includes a commitment to augmented teaching and learning for all students (mastery of multiple levels of skill and knowledge in the core curriculum and beyond), authentic assessment, interdisciplinary teaching, teamwork (for students and teachers), and active involvement of students in their own education.

Hawthorne Elementary School—A Core Knowledge School

Hawthorne Elementary School, in the San Antonio Independent School District, is situated in an extremely poor and physically-depressed section of the city. The school was built many decades ago when the area was highly residential. Housing has now given way to small businesses and factories, many of which enjoy only marginal existences. Many of Hawthorne's students are bused to the school from other neighborhoods. Others live in apartments located in proximity, which often serve as short-term housing for families that move frequently.

Five hundred students, many of them limited- or non-English-speaking, spend their school days in Hawthorne's K-5 classrooms. Nearly all of the school's students (96%) qualify for free and reduced-price meals. The local YMCA provides a needed boost by supporting sports activities, family weekend experiences, child care, and after-school tutorials.

Hawthorne became a Core Knowledge school in 1992. Promoted by E.D. Hirsch's Core Knowledge Foundation (Trinity education faculty member Bruce Frazee is a national Core Knowledge consultant), much of the thematic K-5 curriculum is structured around content-specific determinations of what students should know and be able to do in areas such as history, geography, mathematics, science, language arts, and the fine arts. Curriculum units are interdisciplinary. Often the entire school is working on a single theme (e.g., ancient Egypt), with each grade taking on progressively more complex subject matter.

This school is a constant buzz of activity and a demonstration that children from classically disadvantaged backgrounds, whose own parents may have little education, can thrive in an academically challenging environment. What contributes to the success of Hawthorne, according to its faculty, is the integration of content knowledge and skill development. Students practice skills in the context of engaging curriculum.

Hawthorne is also a partnership school. The YMCA of San Antonio and Trinity University's department of education coordinate a partnership with corporations, neighborhood businesses, human service agencies, religious organizations, and families. The YMCA provides a full-time, onsite coordinator for the program, which includes mentoring, outdoor education, youth fitness, and introduction to city and community resources, including opportunities such as the Children's Museum, airport, planetarium, theater, symphony, and circus.

The Partnership aims to develop a program model in which the school serves as the focus of the community, responding to the community's needs and its expectations. It is an effort to meet many of the challenges children from poverty households often confront, such as gangs, drugs, violence, and a high dropout rate—and to stop problems before they actually begin. Funding is provided by Chapter 1 (Hawthorne has been designated a "total Chapter 1" school under the federal Elementary and Secondary Education Act) and the Drug Free Schools and Communities fund.

Jackson-Keller Elementary School—The Basic School

Located in the Northeast Independent School District, Jackson-Keller served as the national pilot for the Carnegie Foundation for the Advancement of Teaching's Basic School. Designed by the Foundation's late president, Ernest Boyer, the Basic School embraces four central principles: the school as community, a curriculum with coherence, creating a climate for learning, and instilling in students a commitment to character.

Jackson-Keller, home of the Jackrabbits—a human-sized rabbit "billboard" greets entering visitors outside the school with news and events of the day—was closed for a period of time, reopening in 1988 with an enrollment of 500 students and its brand-new Basic School curriculum and philosophy. Located in a building constructed in the 1970s, the school's classrooms are light and airy, anchored by a library "pod" in the center.

Eighty-five percent of Jackson-Keller students live at or below the federal poverty level. The local YMCA provides a variety of extended day activities, including mathematics and reading enrichment, after-school tutorials, child care, and sports. Expanded health care services are also available at the school.

Jackson-Keller was a founding member of Trinity's Alliance for Better Schools. The university's John Moore introduced Jackson-Keller staff to Ernest Boyer, and a partnership was born. Trinity education faculty member Sherry Albright (who has since left the university for the private sector) was instrumental in assisting Jackson-Keller to implement the Basic School principles. She developed inservice activities for school faculty in preparing interdisciplinary curriculum, and helped the school secure technical resources and training through grants prepared by Trinity.

Jackson-Keller students are divided into five "family groups," each composed of students in kindergarten through fifth grade and their teachers. Teachers in each family group cooperate with one another, and older and younger students mix, mingle, and learn together as they participate in activities and field trips throughout the school year. Students remain in the same family group as they progress to the next grade.

In addition to Trinity education students, who come to Jackson-Keller to fulfill their practica and intern requirements, parents, retirees, and members of the business community, as well as students from nearby Lee High School, serve as mentors to the kindergarten through fifth graders. Dubbed "Partners in Education," these individuals develop one-on-one relationships with Jackson-Keller students. care, and a multitude of extracurricular activities.

Mark Twain Middle School

Mark Twain is also located in the San Antonio Independent School District, in the heart of San Antonio's historic district. The school once housed an affluent, and largely white, student population. Today, more than 90 percent of Mark Twain's over 1,000 sixth, seventh, and eighth graders are Hispanic. One-quarter are limited-English-proficient, and 92 percent qualify for free and reduced-price meals.

Mark Twain was one of the first schools in Texas to adopt recommendations for restructuring junior highs along the middle grades concept. It was Trinity, in fact, which approached Mark Twain about the transformation from a traditional junior high to a program modeled on emerging findings about middle-level education.

Beginning in 1987, as part of Trinity's Alliance for Better Schools, Mark Twain faculty and administrators and Trinity faculty spent a year collaboratively developing a program not only to provide middle level education consistent with research findings, but also to create a laboratory for teachers-in-training interested in pursuing careers in middle grades education. Their study and emergent program drew on works such as *This We Believe* from the National Middle School Association; *The Exemplary Middle School,* California's middle school reform report; *Caught in the Middle;* and, later, the Carnegie Council on Adolescent Development's publication; *Turning Points: Preparing American Youth for the 21st. Century.*

Important components of middle-level principles, which shape the Mark Twain program, are "[faculty] membership on academic teams, development and teaching of advisory units, incorporation of cooperative learning strategies, participation in a transitional weekend camping retreat for sixth grade students, and presentation with team members, administrators, and [Trinity University] faculty at state middle-level conferences" (Van Zandt, 1996).

Academic teams are key. Four core teachers and one reading teacher work together to instruct approximately 110 to 140 heterogeneously-grouped students. Teams utilize flexible scheduling, with teachers having the flexibility to rearrange time blocks to meet students' instructional needs (Van Zandt, 1996). An on-site YMCA (another outcome of the Trinity-led Alliance for Better Schools) provides field trips, brokers business-school partnerships, and assists in enhancing parent and community involvement at the school.

Mark Twain has been a school not without problems. Half of the faculty is new to the school, having been assigned there subsequent to the adoption of the middle grades concept. Many of these teachers do not have "ownership" of the original program. The principal has recently been replaced. Nonetheless, with Trinity's continuing support, it is expected that Mark Twain will continue to serve as a learning laboratory for prospective middle school teachers.

Robert E. Lee High School

Robert E. Lee High School, in the Northeast Independent School District, is a large comprehensive high school offering education in grades nine through 12. The school's population has, in just a few years, changed from predominately upper middle-class white to one that more accurately reflects the city's diversity. Just slightly more than one-half of the

BEST COPY AVAILABLE

school's 2,200 students (56%) are Hispanic; 42 percent are Anglo and two percent are black. More than one-quarter of the ninth through twelfth graders (27%) qualify for free or reduced price school meals. Forty-two percent are designated "at risk."

Lee provides Trinity students with a large high school teaching experience, but with a twist. This is a school that is rethinking the way it organizes for teaching and learning—working on new kinds of curricula, more intensive use of technology, and wider availability of resources for students.

International School of the Americas

A stand-alone school that shares the campus of Lee, the International School of the Americas (ISA) was designed around principles stemming from the North American Free Trade Agreement (NAFTA). Its purpose is to foster connections among the United States, Mexico, and other countries in the Western Hemisphere. Enrollment is open to students from throughout the San Antonio area. Opened in 1994, ISA High expects to cap student enrollment at 400.

The curriculum, touts the school's promotional brochure, is designed to "introduce students to international commerce and technology required to succeed in business in other countries." Emphasis is placed on mathematics and science; all students must acquire a working knowledge of probability, statistics, and measurement and information systems.

Concentration is also intense in the areas of geography, politics, language, and culture. Ninth graders are required to develop conversational proficiency in a second language, and a working knowledge of a third. All students participate in business internships and contribute to community projects.

ISA was developed with Trinity's support and encouragement. It was the university that recognized that, with school choice and charter schools becoming ever more prominent on the nation's education agenda, here was an opportunity for a public school district to offer real choice, in the form of a nontraditional high school with a unique curriculum. ISA's partners, in addition to Trinity, are the Valero Energy Corporation and Southwestern Bell. The Harcourt-Brace Educational Development Group has provided funds for faculty professional development.

The schools in Trinity's PDS network model innovative program design; active engagement of faculty in implementing reform and upgrading their own skills through continuous, often school-based professional development; and the structured support of novices. This support is provided by mentors, PDS faculty members especially selected for this role.

MENTORS AND MENTORING

Trinity students spend their field time, both as undergraduates and as fifth-year interns, in the classrooms of PDS master teachers, all of whom have been designated as "mentors" by the university. The term "mentors" is Trinity's term for master teacher or cooperating teacher. Mentors are faculty at one of Trinity's PDSs. Appointed as Trinity adjunct faculty at a ceremony at which the president of the university presides, the approximately 60 mentors refer to their role as "a celebration of teaching."

Many mentors are themselves graduates of the Trinity teacher education program. Others are nominated by their principals or nominate themselves for the mentor role. Mentors receive no financial compensation for their additional duties, though they do receive support in the form of weekend and summer Trinity-sponsored retreats.

During students' practica and intern years, mentors serve as guides, role models, collaborators, and coaches for Trinity students. They are, says Trinity Professor Laura Van Zandt, "pedagogically authentic," modeling the kind of in- and out-of-classroom habits of professional practice that Trinity hopes to inculcate in its teacher education students.

The mentors' role is key. Trinity's teacher preparation curriculum includes no methods courses, per se. There is nothing in the course catalog called "Teaching Elementary Mathematics" or "Social Studies for High School Teachers." Instead, discipline-specific instruction is in the hands of mentors. Trinity students learn to teach by teaching. Under the watchful eye of the mentors, they begin with one-on-one tutoring, working up to partial and then near-complete responsibility for their classes. Mentors, says Trinity's Laura Van Zandt, "give students . . . someone on campus to feel connected to." A more complete treatment of Trinity students' field experiences is provided later.

Mentors and Trinity faculty develop close collegial bonds. They meet formally once a month at Trinity to reflect together on the month just ended, discuss mutual issues of concern regarding their Trinity students, and share successes.

Mentors at each school also meet with one another continually to hone their programs. One mentor at each school serves as PDS Coordinator, assisting with the assignment of students to mentors and meeting with students and with other mentors at the site.

Annually, Trinity faculty, together with the mentors at the PDS with which each of them principally works, organize "retreats," more concentrated and uninterrupted periods for self-study, program analysis, and review of the reform efforts underway in the schools. At the time of writing this, for example, Hawthorne mentors were in the process of taking a step back in order to assess Hawthorne's core curriculum and begin to develop professional practice benchmarks for the Trinity students under their tutelage.

In their role as clinical faculty, mentors teach classes which are conducted at the PDS. Course offerings might include, for example, a study of different learning styles, or multiple ways to approach the same teaching and learning problem. The scope of the classes generally is developed cooperatively with Trinity faculty; the conduct of the classes is the province of the mentors.

Mentor teaching and demonstration takes place in less formal circumstances as well. A visitor walking into ISA, Robert E. Lee, or Mark Twain at lunch time is likely to encounter a group of mentors and a group of Trinity students chatting about the day's activities, planning lessons, and discussing students in their classes. On a visit to Jackson-Keller, practicum students can be found observing classes, working one-on-one with children having difficulty learning to read, tutoring small groups of students in math, and helping to organize the school's latest fund-raising activity.

Mentors receive no financial compensation and their day-to-day workload increases appreciably. Why, then, do mentors undertake the responsibility for Trinity students? Opportunity for their own professional growth, ability to assume a coaching role toward novices, and a collegial relationship with one another, and with Trinity faculty and students, seem to provide the requisite compensation for Trinity mentors. These expert teachers develop an unerring sense of when to pressure and when to support their charges. They display a strong commitment to improving the profession of teaching. And they view the sort of apprenticeship embedded in the Trinity program as essential to developing teachers whose commitment matches their own. Perhaps the comments of the mentors are the most eloquent explanation: This is "professionally enriching for me," says one. "It's what's kept me in teaching," says another. Participation in the Trinity program "has made me feel like a valued professional," says a third.

Mentoring, in addition to providing critical support to prospective teachers, is also part of Trinity's plan to retain good teachers in the classroom. As John Moore explains, a central part of the retention component of the career continuum requires capturing teachers' intellectual curiosity and engaging their professional knowledge about teaching and learning. Mentoring responsibilities provide these expert teachers both with ongoing opportunities to share what they have learned, and to continue to learn themselves.

RESHAPING THE ROLE OF UNIVERSITY FACULTY

In the Trinity model, university-based teacher education supervisors have been replaced by clinical faculty members. These four faculty members, Bruce Frazee, Tom Poetter, Laura Van Zandt, and Cynthia Alford, all hold doctorates and tenure-track positions in the department of education. Placed in their positions on the basis of their commitment to work concurrently in university and in "real school" settings, these individuals have split professional personalities. They spend half of their time (on average, one-half of the work day for four days a week) in the university's professional development partner schools. The other half of their time is occupied by the typical pursuits of university faculty—teaching, research, and writing.

Each clinical faculty member has a specific PDS assignment. Bruce Frazee, a 20-year Trinity veteran and former elementary teacher, is a national consultant for the Core Knowledge Foundation. Frazee taught under the "old" teacher education system at Trinity. When the new program was developed, he quickly signed on for a clinical spot, as he had long been convinced that teachers in training needed a more field-based experience such as the new program would provide. Frazee's assignment is Hawthorne Elementary School.

Laura Van Zandt, a former middle school and high school teacher, works with Mark Twain Middle School. An expert on middle grades education, Van Zandt says she is exactly where she wants to be professionally.

Tom Poetter, a former high school teacher, is assigned to Lee and ISA. Poetter says that when he began to seek a university faculty position, he knew little about Trinity but he was, he says, "intrigued by their ad." He applied for the available position, was hired, and cannot, at this point, imagine being anywhere else.

Cynthia Alford, the newest member of the Trinity clinical faculty team, formerly was a staff member with the developmental teacher education

DTE program at the University of California at Berkeley, an early childhood and primary grades teacher education program. (The DTE program is included in another volume of this *Studies of Excellence in Teacher Education* series.) She operates out of Jackson-Keller.

Clinical faculty effectively "set up shop" in their assigned Professional Development School. They provide counsel, assistance, and an extra pair of professional hands. They take on all manner of responsibility—leading professional development workshops for Trinity students and experienced teachers, writing grant applications to raise money for school-based reform efforts, covering classes in emergencies for absent teachers, picking up doughnuts and making coffee for meetings. They become like one of the public school faculty.

Because these university faculty spend such concentrated hours in the schools, they come to know these institutions well and to be accepted as part of them. Principals welcome them enthusiastically. PDS faculty know them. Students run up to greet them. "Working in reforming schools," says Trinity's Bruce Frazee, "brings added professional perspectives to [Trinity] faculty. It's the kind of professional engagement that keeps [university] faculty rejuvenated and in touch with the real world of school."

Trinity teacher education faculty are quite direct about the kinds of teachers they are endeavoring to create. Trinity, they say, is preparing teachers who will challenge many of education's existing norms, who will infuse schools with new ideas and new strategies, and who will "think outside the box" as they continue to work for change that has the effect of improving achievement for all students.

Advisor, Mentor, and Friend

Trinity faculty—the four clinical faculty members as well as education department chair John Moore—act as advisors to teacher education students. It is the advisor who shepherds students through course work and undergraduate field experiences, and guides students through their fifth-year internships. Advisors form close bonds with their students. "Sometimes I'm the mother who has to take them to task," says Laura Van Zandt, "and sometimes I'm the coach and colleague."

The role of the faculty advisor will evolve and develop as students progress through the program. In addition to general counseling and advisement functions that are much the same year-to-year, faculty endeavor to meet special needs as they arise. This year, for example, grief counseling for students was a topic of concern for Laura Van Zandt's students who were preparing to teach middle school, and she organized discussions on this topic.

Fitting Faculty *Scholarship* to Teacher Education

When John Moore looks for a new clinical faculty member (as he did in 1996 when Cynthia Alford was hired), he says he looks for someone "who cares about [the education of] *teachers* more than about the education of math teachers." In other words, he seeks someone whose commitment to helping students master the complexities of teaching extends beyond an individual subject or area of specialization. He also seeks someone whose scholarly work will grow from their PDS responsibilities. This expectation—that research scholarship and clinical practice will mesh—puts Trinity squarely on the horns of a university dilemma.

Three of the clinical faulty members have been hired at Trinity within the last three years. None holds tenure. The fourth, Bruce Frazee, is a 20-year veteran of Trinity who recently has gone up for appointment as full professor.

Trinity is confronting the conventional university conception regarding the kind of research and writing acceptable for promotion, head-on. The entire education department faculty (with the blessing of the university president who has final say over tenure and promotion decisions) has defined education research in a manner that, on the one hand, does not violate the tenets of good research, and, on the other, enables clinical faculty to produce publications resulting from their work and studies conducted in PDSs and have the work be counted toward tenure and salary advancement.

In its recently adopted "Position Statement on Scholarship," the department declares that:

> . . . Professional development schools serve as effective laboratories for the scholarly endeavors of the clinical faculty from the Department of Education. The scholarly work has the potential of improving teaching and learning in the professional development schools, and at the same time strengthening public education throughout our community and beyond. We believe this form of scholarship is an integral part of offering high quality professional preparation programs at Trinity University.

The university president has made it clear that where teacher education clinical faculty are concerned, he will take a personal interest in making sure that conditions exist that allow them to succeed on the university's terms. In other words, he will personally intervene to ensure that research that is derived from work in Professional Development Schools is given appropriate recognition as scholarly work.

Articles by Trinity clinical faculty recently have appeared in *The Middle School Journal* (Van Zandt) and the *Journal of Education for Students Placed At Risk* (Frazee). These articles (some of which are written in conjunction with school principals or teachers) focus on experiences gleaned and lessons learned from Trinity PDSs. Tom Poetter currently is at work on a book about the first years of the ISA. Some of the chapters in this volume are being written in conjunction with Trinity students who have served their practica or internships at ISA. It is these works that will form the core of faculty members' promotion portfolios.

Professional Development Schools are the laboratories for Trinity education students' field experiences. Guidance is provided by PDS mentors and by Trinity faculty. What, then, does the five-year Trinity teacher education sequence actually look like? What can students expect and what do they experience?

THE FIRST YEAR: GENTLE INDUCTION

The freshman year in college typically is a time of academic exploration. Students "try on" a variety of courses, seeking the best intellectual, and often career, match for themselves. For Trinity students who are thinking about pursuing teaching, the freshman year offers the opportunity to take initial education courses, meet the education department faculty and students who have similar interests, and get a bird's eye view of the schools in which they will begin to learn their craft.

A School and Community Course

"School and Community" is a first-year course that engages students in reading, thought, and discussion about ways in which schools become part of, or are divorced from, their communities, as well as the education implications of various forms of school-community relations. The purposes of the class, according to the syallabus, are to:

- introduce students to notions of the nature of schools . . . and ultimately to help students consider how these notions reflect the community, what they tell us about the community, and/or how they serve the community. . .;

- provide opportunities . . . for students to consider and express the deep, complex relationships and connections between community and school as expressed through several major curricular/cultural perspectives; and,
- support students' research and writing on some aspect of school/community relationships.

Much of the course is structured around the work of Trinity faculty member Thomas Sergiovanni, whose research and writing focus on schools and communities and schools as communities. Sergiovanni defines community as, "the tie that binds students and teachers together in special ways, to something more significant than themselves: shared values and ideals" (Sergiovanni, 1994).

Using the framework provided by Sergiovanni's *Building Community in Schools,* students construct school-based case studies around issues that illustrate how schools become "purposeful" communities, how classrooms serve as democratic communities, and how to develop communities of learners and communities of leaders. Reflective journals are an important component of this class as well. This is students' first introduction to journal writing, an important element of many of Trinity's education classes. For this particular course, students are required to submit, every other week, a two-page reflection on a topic assigned by the professor.

The goal of this class, says Tom Poetter, the faculty member who teaches it, is to help students understand that "good schools are *communities* of people."

Current Issues in Education Course

This second freshman course is informally referred to by Trinity education faculty as the "recruiting class." Here is the first opportunity for faculty to cement the commitment of those students who want to pursue teacher education, as well as to entice those students who have thought about a teaching career but not yet made a decision. This is where cohorts of students—who are likely to spend the next five years of their school lives together—begin to be formed.

In this course, students are introduced to contemporary education and education reform issues. They discuss reasons why public education is such a central policy issue nationally; who are the stakeholders in the reform debate; and what kinds of reforms have been considered, which have been undertaken, and where gaps remain. Much of the discussion focuses on the kinds of reforms underway at Trinity's Professional Development Schools—implementing E.D. Hirsch's Core Knowledge Curriculum at Hawthorne, understanding the tenets of Jackson-Keller's Basic School program, delving into new ways of structuring middle grades education, such as those practiced at Mark Twain, and so on.

Students are also introduced to an array of professional publications: the *Harvard Education Review, Phi Delta Kappan,* and *Education Week;* major national education reports such as *A Nation at Risk* and the Carnegie Foundation for the Advancement of Teaching's *Teachers for the 21st Century;* and books revealing various education perspectives, from Jonathan Kozol's *Savage Inequalities* to Ted Fiske's *Smart Schools, Smart Kids.* Class discussions are lively and spirited as these freshman begin to learn that education is perhaps a bit more complicated than they had assumed.

Students, in teams of two or three, research a "critical issue" in education and display their findings to the class in a 30-minute presentation. In addition, each student prepares a five-page paper on an issue critical to "building better schools for the 21st century." Data collection is accomplished, in part, through school visits.

Here, too, students must keep journals—written records of daily activities, reflections on readings, and thoughts about the practice they've observed. Journals are considered by Trinity to be a central feature of students' own professional development. Designed to be tools for reflection, "not just places to vent about experiences," according to Poetter, journals "help students decide who they are going to be as teachers."

A new component was added to Education 105 in the 1996-97 school year. During the semester, students pay a visit to a Trinity PDS for a firsthand look at, and initial introduction to, a school, which for many of them, will serve as the site of their first introduction to teaching. This trip is made in the company of students' faculty advisors.

Modeling Good Teaching

The philosophy of Trinity's teacher education faculty is that, as university instructors, they must be the kinds of teachers they want their students to become. Thus, students in their freshman year are introduced to a range of teaching strategies, as subtle demonstration and good modeling. Much of class time is spent in discussion, some directed by faculty, others led by students. Readings are chosen from a wide array of sources as a means both to introduce students to multiple perspectives on educational issues and to acquaint them with publications that ought to be continuing dimensions of their professional lives.

YEAR TWO: BEGINNING TO LINK THEORY AND PRACTICE

As sophomores, Trinity students begin to understand the critical link between education theory and school practice by engaging simultaneously in course work and their first field experience in the form of the initial practicum.

Course Work

University-based education course work is framed by "The Child in Society." This class which, "explores the factors that shape a child's growth and development in America," introduces students to a range of individuals whose professional lives are devoted to issues many Trinity students will confront as they move from the sheltered university environment to the very real world of urban schools. Gangs, substance abuse, medically fragile students, issues of cultural diversity, gifted and talented students, limited-English-proficient learners, and students with emotional and other learning disabilities are explored.

Students are required to prepare three critiques of "relevant articles or chapters of books of [their] choice." In this course, again, students are required to maintain reflective journals on the week's topic of discussion.

Preparing to Teach: The First Practicum

Field experience for Trinity students begins in the sophomore year with the first practicum. For three hours each week, students will work in a PDS with Trinity faculty and PDS mentors. This is the first of three practica, the next two occur in the junior and senior years.

Through the practica, Trinity students will assume increasing responsibility for classrooms as they advance in experience. They will come to understand education from a whole school perspective (the sophomore year focus), through the eyes of an experienced teacher (junior year), and

BEST COPY AVAILABLE

from the vantage point of a student (senior year). By the completion of the three years of practica, students will have observed a wide variety of lessons, developed their own lesson plans, constructed various student assessments, graded papers, assembled curricula, tutored individual and small groups of students, and conducted whole class activities, all under the watchful eye of experienced mentors.

The goal of the practicum, from the very first one, is for students to link what they are learning in their university courses with the practical realities of teaching. Students may read about or discuss the theories underlying Core Knowledge in Education 105. They will see those theories put into practice at Hawthorne. They may study the theoretical rationale for middle grades education in class. They will see it played out at Mark Twain.

The sophomore practicum's focus is the school. The purposes of the practicum are to:

- [Help students] obtain a larger perspective on the workings of a public school, its various resource personnel and special programs;
- Acquaint students with the complex challenges of running a school on a daily basis;
- Deepen students' understanding of good teaching through observations of and discussions with selected master teachers; and,
- Expand students' opportunities to teach in a real classroom setting.

The first two weeks of the practicum focus on the structure of the school as a whole. Students visit and observe resource rooms, the library, counselor's office, attendance office, special programs, and the like. For the rest of the semester, these sophomores spend their practicum time in the classroom of one PDS mentor or master teacher. Trinity students work one-on-one with students in their assigned PDS class. They grade papers and administer tests, and learn how instruction is paced and how planning is done. Toward the end of the semester, practicum students must teach at least two lessons (or classes) under the close supervision of their mentor.

Practicum written assignments are designed to encourage students to be observant and reflective. Thus, students must prepare a written description of a lesson they have watched their mentor teach, prepare their own lesson plans, and construct a paper on the culture of the PDS in which they are working. Students' grades for the practicum are determined by their own participation in classrooms, the quality of their written work, and by an evaluation from their PDS mentor.

Practica students are never alone. They are assigned to PDSs in cohorts in this first practicum and throughout the remainder of the program. This kind of grouping for field experiences provides students with a natural network of colleagues. It begins, early in their professional lives, to make these practitioners comfortable with the demands and responsibilities of collegiality and cooperation. It also provides a safe harbor in times of stress. "These students," says Bruce Frazee, the Trinity faculty member who works principally with Hawthorne School, "need a lot of guidance and hand-holding." He has established a "buddy system" for his 24 sophomore practicum students, linking them with more experienced Trinity practicum students as well as with fifth-year interns.

Ending the Sophomore Year: Admission to the MAT Program

Formal admission to the teacher education program comes in the sophomore year, once students have completed some academic and education course work, and once they have completed their first field-based experience in the schools. Each year 20-30 percent of the Trinity teacher education cohort come as post-B.A. students. Their requirements for admission to the MAT are similar to those for the undergraduates; additional requirements include a minimum score of 1,000 on the Graduate Record Exam and an interview with university and PDS faculty.

Formal requirements for the MAT program include a cumulative 3.0 grade point average in the first two years of college, three letters of recommendation from individuals familiar with the student's potential teaching ability, passage of or exemption from the Texas professional skills test, and approval by Education Department and university faculty committees. It is not sufficient, then, for students to be in good academic standing or to have taken the requisite series of courses. In order to become an official member of Trinity's teacher-to-be cadre, students must demonstrate both academic success and teaching promise. This is the reason admission is delayed until *after* students have completed the first practicum.

The education department faculty reviews applicants for academic success *and* for "success" in their first practicum. The mentor's evaluation is critical. A recommendation goes forward from the faculty to the university committee on teacher education, which John Moore chairs. Faculty from other disciplines are brought into the deliberations. Once admitted, a students' progress is regularly reviewed by the education department faculty.

COMPLETING THE UNDERGRADUATE YEARS

The junior and senior years at Trinity include additional education coursework and two more practica. Courses focus more intensively on public schooling in the United States, on international education comparisons, and on Trinity school reform efforts. Students also devote a portion of the semester to drafting their own agenda for school improvement.

"Growing Up in America," a junior-year course, acquaints students with the three developmental stages of childhood: the infant and very young child, the school-aged child, and the adolescent. Topics of study include cognitive development, gender differences, contents associated with race and ethnicity, learning variances, measuring intelligence, and emotional changes that children experience at various developmental stages. No papers are required for this course. Grades are determined by two midterm examinations and a final exam.

"Schooling in America," the senior-year course, is "a study of the American school and its role in contemporary society." In this class, students explore the structure of schooling and various American school improvement initiatives, as well as, for comparative purposes, the nature of the schooling enterprise in Mexico, Europe, and Asia. Additionally, students critically review Trinity's mission vis-a-vis school improvement and the partnerships and projects the university has launched in and around the San Antonio area.

Reading, writing, and reflection again are important aspects of course requirements. Students must:

1) maintain a personal bibliography of semester readings, which must include at least four books and two entries each week from professional journals and the popular press;
2) conduct a study and prepare a critique on a topic such as John Dewey's contribution to public education, the pros and cons of home schooling, lessons to be learned from early childhood education programs in Europe, or the potential impacts of various kinds of education choice programs;
3) develop a profile of the education system in a country other than the United States; and

4) research, in teams of two or three, one of the education reform initiatives supported by Trinity (e.g., Core Knowledge).

The Practica

In their junior year, students' practica focus is *the master teacher.* Assigned to a different PDS than the one in which they did their sophomore practicum, according to the course syallabus students are to "become keen observers . . . and familiarize [themselves] with techniques and behaviors" of accomplished practitioners. How do veteran teachers begin a class lesson? How do they introduce new material? What kinds of management and discipline strategies do they employ? How do they move from one topic of study to another? How do they account for students' individual learning styles and needs?

As with the sophomore practicum, students spend the initial part of the semester observing, then ease into more classroom-focused activity, and finally assume some teaching responsibility, under the guidance of their mentor.

Students are required to keep a journal in which they record their observations and reflections on topics such as classroom organization, teacher and teaching style, discipline and management, attention to individual student needs, and classroom procedures. Grades are, again, dependent on attendance, written products, and the mentor's evaluation. Mentors are asked to evaluate practicum students on their professionalism (e.g., punctuality, appearance, sense of responsibility), communication skills with students and adults, and classroom experiences (e.g., organization, nature, and quality of lesson).

As seniors, practica students devote principal attention to *the student.* The goal of this inquiry-oriented study is to assist students to recognize and be sensitive to students' individual learning styles and needs. Again, practicum students spend time in the classroom of a PDS mentor, assuming increasing levels of responsibility as the semester proceeds.

For this experience, Trinity students must develop a case study (or "case journal," as Trinity refers to it) of a single student, gathering data by "shadowing" their selected student for the semester, talking with the student's teacher, grading the student's work, and reviewing the student's official school records.

Summary: The First Four Years

By the time they have completed four years of study and three practica, Trinity students have a broader and richer experience than many of

43

their counterparts in other institutions. They have been introduced to many of the "big ideas" and issues surrounding schooling in America. They have a grounding in learning theory. They are developing professional habits of reflection and gaining an understanding of how to use research to enrich classroom practice.

THE FIFTH-YEAR PROGRAM

The Summer Bridge

While some of their friends spend the summer celebrating college graduation, Trinity teacher education students take two more courses, "Curriculum" and "Teaching Inquiry and Practice."

In the curriculum course, students study the history and key issues and debates in the development of public school curriculum in the United States. They probe issues which drive various kinds of curricula. They explore contemporary learning theory research, multiple intelligences, and issues surrounding performance-based assessment, and they design an educational program for students with different learning styles. A research project, culminating in an oral presentation, is required of each student, as is the development of an interdisciplinary curriculum unit.

"Teaching Inquiry and Practice" is designed to provide students with more in-depth understanding of teaching models and styles. The elementary version of this course, for example, focuses on: "describ[ing] the optimal methods of classroom organization which provide the support structure for learning; develop[ing] a reading program for students with a variety of learning styles, incorporating phonics, structural analysis, whole word teaching, and the whole language approach; describ[ing] optimal classroom grouping methods, both heterogeneous and homogeneous; and develop[ing] methods that regular education and special education teachers can use to work together to design the best programs for all students."

Summer coursework, which immediately precedes students' most intense field experience, also endeavors to ground them in various means by which to organize teaching and learning in the classroom. Now these students are ready for the final challenges of their teacher preparation program.

A Year of Supported Independence

Additional coursework, more journal writing, and a substantial research paper are part of Trinity students' fifth-year experience. The key element of this year, the component that, in the words of one Trinity student "brings it all together," is the year-long internship.

Final Classes

Fifth-year classes are designed specifically to complement students' field experience and to broaden their horizons regarding educational issues. According to course syallabi, courses offer students an opportunity to:

> learn and practice an array of teaching methods; connect research and theory in education by conducting [their] own inquiries on teaching and learning; examine trends in education research and practice, including cooperative learning, alternative learning styles, models of teaching, multicultural education, and the use of technology in instruction.

In "School Leadership, Supervision, and Evaluation," taught by Thomas Sergiovanni, students explore the culture of teaching and schooling, study methods of supervising and evaluating professional practice, and revisit the notion of school as community. According to the course syallabi, students are asked to reflect on and describe the "rites, rituals, norms. . . and the ways of thinking and acting that seem to permeate. . . schools."

Interestingly, in this class students confront their implicit education beliefs by examining their explicit teaching actions. In the course syallabi, they are asked to "compare [their] stated [educational] platform with [their] platform in use." Students first describe, in one to two pages, their own educational platform, defined as the set of "beliefs, opinions, values, attitudes, convictions, goals, and purposes which [will] provide a foundation for practice." They then must keep a log that displays teaching strategies, the assignments they give as instructors, relationships with students, and the reasons for the classroom decisions they make. Next they are asked to analyze their logs and compare their "stated platform" with their "platform in use." Finally, students prepare a written analysis of what the observed differences in the two platforms has taught them about their own theories of teaching and their own teaching practice.

Students also implement a form of clinical supervision in this course. Working in small teams, class members demonstrate teaching to one another, observe each other in a classroom setting, and develop record logs and supporting portfolio data designed around collegial supervision. Thus, early on, Trinity students are inculcated with the belief that peer assistance is a necessary part of professional development.

The Culminating Research Paper

Students comment especially about their fifth-year research paper. While undergraduate papers typically are perceived as "work to be done for the class," the fifth-year paper has a different tenor. It marks a kind of watershed for students. They describe this assignment as assisting them to be reflective about teaching, and to think deeply and in complex terms about an educational issue that is personally important to them.

The paper, which students lovingly refer to as "part of the Trinity indoctrination," is designed to encourage students to find their own answers to educational problems—gender equity, teaching values, service learning, and assessment and standards have been popular topics recently—and sets the stage for the challenge of flying solo in their own classrooms. Students describe the paper as "establishing a basis for ongoing professional research and our own professional writing for the future."

This final writing assignment, says Tom Poetter, gives "people [the opportunity to] interact personally with the data and inform their own teaching." This, he says, is critical for helping students to develop a conception of the "big picture" of education and to "connect issues of everyday practice to wider [educational] issues."

The Internship

If the practica are the gradual introduction to the challenges of the classroom, the internship is a bit of baptism by fire. The university, utilizing four million dollars in scholarship endowment funds dedicated to support fifth-year education students, provides financial assistance to nearly all interns, so that their final university year can be devoted to becoming full-fledged teachers.

The internship is an intense, year-long, in-the-schools experience which begins in August with the pre-school teacher inservice. From day one, interns are expected to function as members of their respective school faculties, albeit supervised and supported members. Throughout this fifth year of study, interns, who are assigned to schools in cohorts divided both along elementary/secondary lines and by the PDS in which they serve, gradually assume more responsibility for classrooms, under the guidance of their PDS mentors.

In the fall, interns spend four days a week, from 8:00 a.m. to 3:00 p.m., in their assigned PDS. They also attend classes taught by the mentors on an average of two evenings each week. Classes might include, for example, the study of multiple intelligences, an examination of different models of teaching, multicultural education, or specific pedagogy related to the reform efforts of a particular PDS (e.g., Core Knowledge at Hawthorne). In the spring, interns are at their assigned PDS five days a week, and additionally take one evening course at Trinity. Regular cohort "debriefings" are also part of the program, as well as opportunities for students to get together, discuss the activities in their schools and classrooms, and gain support, encouragement—and often good ideas—from their colleagues. Interns also videotape and watch each other's lessons. They comment on and critique each other's practice as a means of improving their own. And once again, they keep a journal, a record of their internship year. The journal is a means to display students' own emerging philosophies of education. It is, in the words of one Trinity student, "a way to show off my educational soul."

In addition to classroom teaching responsibilities, interns are encouraged to become involved in other aspects of the life of the school, such as extracurricular activities. Involvement with their students' families is a "given." The Trinity message is that the role of the teacher extends beyond the four walls of the classroom. Students are expected "to become involved in the entire school operation, including everything from governance to administrative duties" (from the description of *Advanced Clinical Practice*).

"Colleagues" characterizes the relationship between interns and mentors. The internship "is cooperative," remarked one Trinity fifth-year student. "It's not 'let me show you how to teach.'" "Interns are prepared before they get here," say the mentors. "They bring fresh ideas to the school, often based on the latest research. They force *us* to think about change."

Significantly, as one PDS principal remarked, "Interns come with a realistic view of teaching." Their practica time in the "real world" of schools equips the interns with a grounded understanding of the way in which schools function, the routines of classrooms, and the challenges they can expect as their time becomes increasingly devoted to teaching.

Watching Trinity interns teach is watching good teaching in action. Maria Rodriguez, an intern at ISA, conducts social studies classes in which students are planning projects to be presented at a community "screening." It is April, near the end of Maria's intern year. The students' culminating activity for the semester is to present to a panel of educators and other adults their own research on a topic of particular interest. Maria helps the students with the research, works with groups to organize their presentations, provides advice and counsel on data organizing and display strategies, and helps them to anticipate the kinds of questions they are likely to get.

It is clear that the ISA students accept Maria as their teacher, and she accepts that responsibility. This is not the classroom of a typical student teacher. Maria's PDS mentor is uncompromisingly enthusiastic about the intern. She marvels at Maria's competence and confidence. She says Maria—like other Trinity interns whom she has mentored—was ready for the classroom from the first day of the semester. Having interns in PDSs, she says, "is like having double staffing at our school."

Trinity interns are self-confident and professionally secure. They model what they have learned in their classes—a variety of teaching techniques, careful thoughtfulness about instructional strategies, and attention to the needs of individual learners. Using research to support decisions about instructional practices is, says a Trinity intern, "simply part of what we do."

Clinical Supervision in the Real World

Students describe the internship year as a "hybrid between support group and think tank." Intern meetings focus on knotty topics such as, Whose is the responsibility for learning? Does it rest solely with the teacher? Are students responsible for their own learning? What professional roles ought teachers to assume? What kinds of responsibilities does a teacher have to students. . . .? "The program," said one Trinity intern, "helped me to think of myself as a leader in a school and to think that being very active in the lives of my students was right and proper."

In their schools, interns are simultaneously protected and pushed. Given the freedom to experiment and the permission to make mistakes, they are also held accountable for their professional actions.

In the intern year, a tense and intense period for all of the students, reducing stress and sharing stories become even more important. Laura Van Zandt's advisees have "taking care of ourselves" evenings in which they socialize, exercise, and generally take care of their own physical and mental health as a way of reducing stress. Students, in the company of their advisors, are also provided the opportunity to meet first- and second-year teachers to share experiences, and they participate in annual retreats in order to share information about jobs and interviewing techniques.

By the end of the intern year, Trinity students have a clear understanding of the standards of competent professional practice and the ethics of good teaching. They have experienced both success and frustration in the classroom. They have had an opportunity to talk over—with one another, with their mentors, and with university faculty—their good days and bad. They know what they already do well and are aware of those areas for needed improvement. They are able to discuss and assess the relative merits of various pedagogies and models of teaching, and their conversations are grounded in both research and practical experience.

Students praise the intern experience, while at the same time not minimizing its challenge. "The full-year teaching experience was the best part," says a recent Trinity graduate. "I loved finding my philosophy of teaching. I was truly ready for my own classroom." Says another, "I'm not going to have the typical first year. I've already had it."

The not-so-hidden agenda of the internship year is achieved as well. Students understand the importance of building and sustaining a professional culture—conferring with colleagues, attending conferences, writing and presenting papers, developing curricula, and keeping current with research.

The Capstone Activity: Creating a Professional Portfolio

The analog to the Master's thesis for Trinity MAT students is the development and presentation of a professional portfolio. The portfolio is an opportunity for students to present their personal philosophy of education. They reflect on their years of teacher preparation and their year of internship teaching. This is "the opportunity for interns to display to the academic and clinical faculties that [they are] not only prepared to enter the [teaching] profession, but also that [they are] able to view [their] own teaching in a reflective manner" (from the description of *Advanced Clinical Practice*).

Students begin a portfolio "data dump" in the fall of their fifth year. The goal is that, by the end of that year, students will be able to create a "story about their year in teaching," says Trinity faculty member Tom Poetter.

The portfolio is meant to be a working professional profile. While each one is different, typical elements include a sample unit or set of lesson plans, course syllabi, a written statement of the student's philosophy of education, the fifth-year research paper, photos of students whom the intern has instructed, samples of student work, a videotape of the intern teaching, a resume, records of professional presentations (all of the Mark Twain interns, for example, presented at the Texas Middle School Conference), publications (books or chapters published or in progress), and other relevant artifacts such as letters of commendation from their students' parents, mentors, and principals.

At the end of the year, each student "presents" his or her portfolio. Portfolio demonstrations are ceremony. Trinity education department faculty, PDS school mentors, and the entire group of interns attend. Presentations include innovative techniques interns have developed or adapted over the course of their years of study at Trinity. A group of high school interns, for example, displays an interdisciplinary curriculum unit. They describe the processes of development and implementation, and they analyze the results. They are reflective and self-critical.

Developing a professional portfolio, and then presenting it as a culminating teacher preparation experience, is a kind of performance-based demonstration of teaching. Interns explain to faculty and fellow students *what* they have been doing in their classrooms and *why* they have been doing it. They are required to communicate to peers the nature of their practice.

Portfolios remain the property of the interns. They are encouraged to take their portfolios along on job interviews, in order to demonstrate to prospective employers their evident depth and breadth of professional expertise.

LIFE AFTER TRINITY

Teacher certification in Texas is structured around the ExCET (Examination for the Certification of Educators in Texas) program. The program, consisting of a series of criterion-referenced tests, is designed to assess subject matter knowledge as well as professional knowledge required of entry-level teachers.

Trinity has a perfect score. One hundred percent of Trinity's teacher education graduates have successfully passed the tests.

More significant, perhaps, all of Trinity's graduates—100 percent—are offered teaching positions as soon as they complete the Trinity program.

Principals are nearly unanimous when asked if, given the opportunity, they would hire a Trinity graduate:

> The Trinity graduate interviews with [a] completed portfolio, one year of clinical experience, and a sincere desire to be in a leadership position. I have consistently been impressed by their motivation and drive to serve students.
>
> MAT graduates [from Trinity] are self-assured, confident, and highly responsible. They continuously model a desire to improve the educational setting for their students. They are excellent mentors for other teachers. They appear knowledgeable beyond their years of 'real life' experience.
>
> Graduates have a knowledge of instructional practices and use a variety of teaching strategies that usually I find only with teachers who have four or five years of experience.
>
> MAT graduates have a good understanding about the scope and sequence of what is to be taught. This does not mean they are linear in their teaching. It does mean that they are more experienced and are better able to build connections in learning.

Trinity's newly-minted teachers are selective, however. They search out districts and schools that are welcoming to their teaching philosophy and the kind of professional practice on which they have cut their baby teeth.

Many Trinity graduates try to secure positions in the PDSs. If they cannot stay in Trinity schools, they seek other schools with similar approaches to teaching and innovative programs. Hawthorne "graduates," for example, look for elementary schools that are implementing a Core Knowledge curriculum. Mark Twain interns seek out middle schools that have adopted the middle grades philosophy. Where PDS openings do exist, Trinity graduates often are eagerly snapped up. The International School of the Americas, for example, hired four Trinity graduates in 1996-97.

John Moore rather delightedly recounts the story of three Trinity graduates who considered themselves a kind of professional team. They worked well together, shared similar educational philosophies, and wanted to continue "the Trinity way" of teaching and collaboration in their first teaching assignments. These students decided to interview for jobs as a team. Not all schools welcomed this approach—or the forthrightness of these novices—but the new teachers were persistent. In the end, all of them were hired at the same school.

Graduates' Assessments of Trinity

It is part of the conventional lore of teacher preparation that graduates of teacher education programs are at best dismissive, at worst disdainful, of the utility of their training for teaching. Trinity graduates do not fit convention. They generally laud their teacher education program as successfully preparing them for their chosen career.

On a survey of recent Trinity graduates administered for this research, an astonishing 92 percent replied that Trinity's program prepared them "well" or "very well" for teaching. And, nearly 90 percent of Trinity graduates (88%) agreed with the statement, "A lot of my decisions about teaching come from what I learned in my teacher preparation program."

Trinity graduates were quizzed about various aspects of their teacher education program and the connection between their university study and their actions as classroom teachers. They were asked about planning instruction and assessing student progress, about adapting teaching to students' different learning styles and using research as part of their practice, and about cooperating with colleagues and becoming leaders in their own schools. In every dimension, Trinity graduates' perception of what they do aligns with components of their teacher preparation.

When asked how well their teacher education program prepared them to "use knowledge of learning, subject matter, curriculum, and student development to plan instruction," 86 percent of the graduates polled replied, "well" or "very well." High percentages (89, 82, and 92 percent respectively) of Trinity's graduates say that their teacher education program prepared them "well" or "very well" to "understand students' different learning styles, choose teaching strategies for different instructional purposes, and to meet different student needs," and "use instructional strategies that promote active student learning."

Nearly 90 percent of Trinity's recent graduates replied that their teacher education program prepared them "well" or "very well" to "use a variety of assessments to determine student strengths, needs, and progress" (89%)

and to "conduct inquiry or research to inform [my] decisions" (87%). An even higher percentage (95%) asserted that Trinity prepared them "well" or "very well" to "assume leadership responsibilities in [my] school."

It is often claimed, with reasonable justification, that teachers are not encouraged, and do not learn how, to cooperate with one another. Isolation—teachers functioning as islands in their own classrooms rather than as members of school-wide communities—has been a consistent source of concern among contemporary education reformers. Trinity's graduates, when asked how their teacher education program prepared them to "plan and solve problems with colleagues," by a 90 to 10 margin replied, "well" or "very well." Nearly all of the Trinity graduates surveyed (97%) said they regularly "share ideas about instructional approaches with other teachers."

Finally, and perhaps most telling, the Trinity graduates were asked, "If you had it to do all over again, would you attend the same [teacher education] program?" An impressive 94 percent replied, "yes."

Maintaining the Trinity Connection

There is an obvious tension between placing Trinity graduates in schools very much like the PDSs that have nurtured them, and sending these students out to plant new seeds of innovation and reform in schools relatively untouched by change. For students who do not secure, or do not seek, positions in the PDSs, the dilemma is how to help them maintain the kind of energy and enthusiasm for the new and innovative that characterized their preparation experience.

Graduates who remain in the San Antonio area are invited to return once a month to the university to discuss their teaching experiences. Initiated under auspices of the Department of Education's Principals Center, these monthly professional conversations provide a kind of natural and continuous networking and support system. Participants exchange successful, and not-so-successful, classroom strategies, discuss current education journal articles, and generally use these sessions as opportunities for their continuing professional growth and development.

DISTINGUISHING CHARACTERISTICS OF TRINITY'S PROGRAM

Five interdependent characteristics shape teacher education at Trinity. All contribute to a program which:

- aims to prepare teachers who possess a deep knowledge of the subject(s) they will teach and understanding of the various ways in which children learn;
- endeavors to equip teachers-in-training with a quiver full of instructional strategies and the know-how to adapt these pedagogies to the individual learning needs of an increasingly diverse student population; and,
- focuses on the teacher as instructional problem solver and reflective decision maker.

Department of education faculty maintain a clear and unified sense of mission, purpose, and commitment. The education faculty speak with one voice about the goals of teacher preparation. The program, in other words, has a clear point of view.

All education department faculty are committed to preparing teachers who are thoroughly grounded in subject matter, have a firm foundation of education theory, understand and value education research, and are reflective practitioners and continuous learners. Trinity has developed what has been characterized as a belief system, and the faculty buy into that system.

Leadership is important. John Moore transmits his passion to transform teacher education to his Trinity and PDS colleagues. He is, at his core, an activist who believes the university has an obligation to assist schools to become full-fledged learning communities. He sees the "big picture," particularly that preparation is just one step on a long career path.

Trinity faculty believe their obligation does not end when students graduate. They view their program as full circle—recruitment, preparation, and retention—and as full service through teaching, coaching, bringing innovation to schools, and providing ongoing support and opportunities for professional renewal.

The university-school partnership is genuine. "Everyone [interns, mentors, school administrators, clinical faculty] is at the table as an equal," says Richard Middleton, Superintendent of San Antonio's Northeast Independent School District.

There is an extremely strong relationship between the university and the Professional Development Schools. Trinity spearheads many of the school-based education reform efforts and plays a seminal role in raising the requisite dollars to implement school change.

The schools provide the venue for students to learn and then sharpen their professional skills. Teachers and administrators are involved with university faculty in continually refining the program.

Moore believes the essence of teacher education lies in the school-university partnership. The university provides the foundation for successful field experience; but it is that field experience that is essential to developing competent practitioners. "The university," says John Moore, "is *not* where our education program happens. It's at the schools."

In effect, the Trinity teacher education program is the result of a series of spirited (and continuing) dialogues and debates and a set of unwritten but fully acknowledged mutually reinforcing pledges. The university has pledged to provide to its partner schools teachers-in-training who are academically prepared for the classroom setting and to assist these schools in their education reform efforts through university-led fundraising and university-proffered staff development. "The university's part [of the school-university partnership]," says Bruce Frazee, "is school improvement."

Participating schools (the PDSs) have agreed to assume co-responsibility, with the university, for the preparation and induction of new teachers. Experienced teachers in PDSs have become mentors, taking under their professional wings both undergraduate and graduate students for real-world classroom experience and ongoing professional development.

It is this mutuality—the generally held view that teacher education "belongs" neither to the university nor to the schools, but is a shared responsibility to which each contributes as an equal partner—that makes the bond so strong.

The program consciously and conscientiously blends theory and practice. Trinity's teacher education provides strong emphasis on students' academic preparation (in discipline-based subjects and education theory) *and* pays considerable attention to the how-to's of teaching. Students have many and repeated opportunities to learn by doing, to put into practice what they have studied in their university classes, and then to reflect on their experiences.

Learning takes place in context. The interaction between university-based courses and in-the-classroom experiences is conscious and deliberate. The program is at once research-based and experiential.

Students describe Trinity's education classes as offering a "banquet of ideas." Through reading and demonstration, students are introduced to

BEST COPY AVAILABLE

multiple models of teaching. Students comment particularly on the freedom, albeit guided freedom, they are given to explore their own notions of teaching and learning and their own conceptions of education.

Courses are not structured as sessions to provide students with the "right" answers to complex educational problems. To the contrary, students are at first frustrated to discover, then surprised to learn, then accepting of the fact that education is enormously complicated, that there is no one right answer for all circumstances, and that one of a teacher's greatest challenges is constantly to adapt and even invent new approaches and strategies that can be successful in ever-changing classrooms.

Students learn about research and learn how to conduct their own research. They discover, through class assignments, that research can be both a solitary activity and a team effort. And they are helped to discover the criticality of continuing research for their own ongoing professional growth and development.

"Reflection is the key. I ask 'why' instead of just 'how.' I continue to value reflection as the best way to improve my teaching," says a Trinity student. Reflection is a key component of education coursework. Students are compelled to think about why particular issues gain precedence, how social and cognitive development affects classroom behavior, ways in which schools are elements of larger and more complex communities, and dimensions of students' backgrounds that may contribute to their levels of educational achievement.

Faculty describe this focus on reflection as a means by which to dampen the natural tension between equipping novice teachers with the practical professional skills they need and assisting them to develop productive intellectual lives.

The focus of the field experience, from practica to the internship, is on students. As one recent Trinity graduate commented, "[The program] taught me that we should always ask ourselves if what we are doing is best for the child, is it child-centered?"

The program models continuous improvement. "Reflection is a two-way street," could be a Trinity motto. Trinity education faculty think constantly about how to improve their program. They reexamine courses each semester, seeking ways to provide more relevant experiences for their students. As a result of issues raised, for example, mentor development efforts have been enhanced; more emphasis has been placed at the beginning of students' fifth year on communicating various models of teaching; the program now more forcefully takes up the challenges of teaching diverse populations; and more money has been raised for fifth-year endowments.

The Forum, an outgrowth of the original group of university and school professionals who developed the five-year MAT program, continues to meet each year to assess and revise the program. However successful Trinity's teacher education efforts may appear to be, those who are most intimately involved in implementation continue to consider the program a work in progress.

Trinity aims to produce "change agents." Trinity graduates enter the profession with an expectation that the role and responsibility of the teacher is broad and comprehensive. To be successful in their classrooms, Trinity-prepared teachers believe they must be active in the communities in which they work; they must engage with students' families; and they must remain active in their profession by continuing to read, write, research, and present. As one recent Trinity graduate expressed it, "We have a moral contract to be change agents."

FINAL WORDS

Perhaps, at its core, then, teacher preparation at Trinity is about building a kind of professional capital. The university goes beyond preparing skilled, knowledgeable, and competent individual teachers. By investing in the development of cohorts of school-based mentors who practice in a network of Professional Development Schools, and by equipping novice teachers with an expansive notion of professional obligation and a foundation on which to construct their own collaborative professional culture, Trinity is contributing significantly to the development of a growing bank of practitioners who share an important—and for public schools, potentially critical—belief in and commitment to educational change.

REFERENCES

Alexander, W. M., & George, P. S. 1981. *The exemplary middle school.* New York: Holt, Rinehart, and Winston.

U.S. News and World Report. (1994, May). *America's best colleges.* Washington, DC: Author.

California State Department of Education. (1987). *Caught in the middle: Educational reform for young adolescents in California public schools.* Sacramento, CA: Author.

Carnegie Council on Adolescent Development. (1989). *Turning points: Preparing America's youth for the 21st century,* Washington, D.C.: Author.

Center for Educational Leadership, Trinity University. (1994). *Smart schools for San Antonio's future.* San Antonio, TX: Author.

Center for Educational Leadership, Trinity University. (1995, Fall). Smart schools for San Antonio's future. [Progress Report]. San Antonio, TX: Author.

Core Knowledge Foundation. (1994). *Core knowledge: The common ground for uncommon success.* Brochure.

Frazee, B. (1996). Hawthorne elementary school: The university perspective. *Journal of Education for Students Placed at Risk, 1*(1), 13-23.

Hawthorne Elementary School campus YMCA: A working partnership for the care and education of elementary school students in at-risk conditions. [Brochure.] San Antonio, TX: Author.

Holmes Group. (1990.) *Tomorrow's Schools: Principles for the Design of Professional Development Schools.* East Lansing, MI: Author.

International School of the Americas. *International School of the Americas.* [Brochure.] San Antonio, TX: Author.

Jackson-Welles Elementary. *Jackson-Welles Elementary: The basic school.* [School Newsletter]. San Antonio, TX: Author.

Mark Twain Middle School. (1995-96). *Mark Twain Middle School: A learning community.* [Welcome Booklet]. San Antonio, TX: Author.

Mentzer, D., & Shaughnessy, T. (1996). Hawthorne Elementary School: The teachers' perspective. *Journal of Education for Students Placed at Risk, 1*(1), 13-23.

National Middle School Association. (1987). *This We Believe,* Columbus, OH: Author.

Putka, G. (1991, December 5). Making the grade: Teacher quality rises with improved pay, concern for schools. *The Wall Street Journal.*

School Superintendents of Texas County. (n.d.). *Getting accountability and school improvement on track in Texas.* San Antonio, TX: Center for Educational Leadership, Trinity University.

Schubnell, G. O. (1996). Hawthorne Elementary School: The evaluators' perspective. *Journal of Education for Students Placed at Risk, 1*(1), 13-23.

Sergiovanni, T. J. (1994). *Building community in schools.* San Francisco, CA: Jossey-Bass Publishers.

Trinity University, Department of Education. (n.d.). *Teacher education at Trinity University: Program conceptualization and development.* [Internal Document]. San Antonio, TX: Author.

Trinity University. (1987). *Teachers speak: Quality schooling for Texas today and tomorrow.* Trinity University, Brackenridge Forum for the Advancement of Teaching. Working paper. San Antonio, TX: Author.

U.S. News and World Report. (1990, October 15). *The Top 60 Regional Colleges and Universities.* Special Issue. Washington, DC: Author.

Toch, T. (1991). *In the name of excellence: The struggle to reform the nation's schools, why it's failing, and what should be done.* New York: Oxford University Press.

Trinity University. (1993, June). *Trinity University.* [Brochure]. San Antonio, TX: Author.

Trinity University, Department of Education. *Principals' Center Newsletter, 3* (5). San Antonio, TX: Author.

Tyson, H. (1994). Preparing Students for the Real World of Teaching. In *Who will teach the children? Progress and resistance in teacher education*. San Francisco, CA: Jossey-Bass Publishers.

Van Zandt, L. M. (1996). Assessing the effects of reform in teacher education: An evaluation of the MAT program at Trinity University. *Paper presented at the annual meeting of the American Education Research Association, New York.*

Van Zandt, L. M. & Harlan N. K. (1995). A professional development school improves teacher preparation: Twain meets Trinity in Texas," *Middle School Journal, 26* (5), 11-16.

YMCA of San Antonio. *YMCA community collaborations for educational enrichment.* [Brochure.] San Antonio, TX: Author.

APPENDIX A: METHODOLOGY

Data for this case study were gathered over a period of approximately one school year (1995-1996). Two visits, each of three days duration, were made by the researcher to the San Antonio area. Additional data were collected with follow-up phone calls.

Data gathering employed both qualitative and quantitative approaches. Sources of data include:

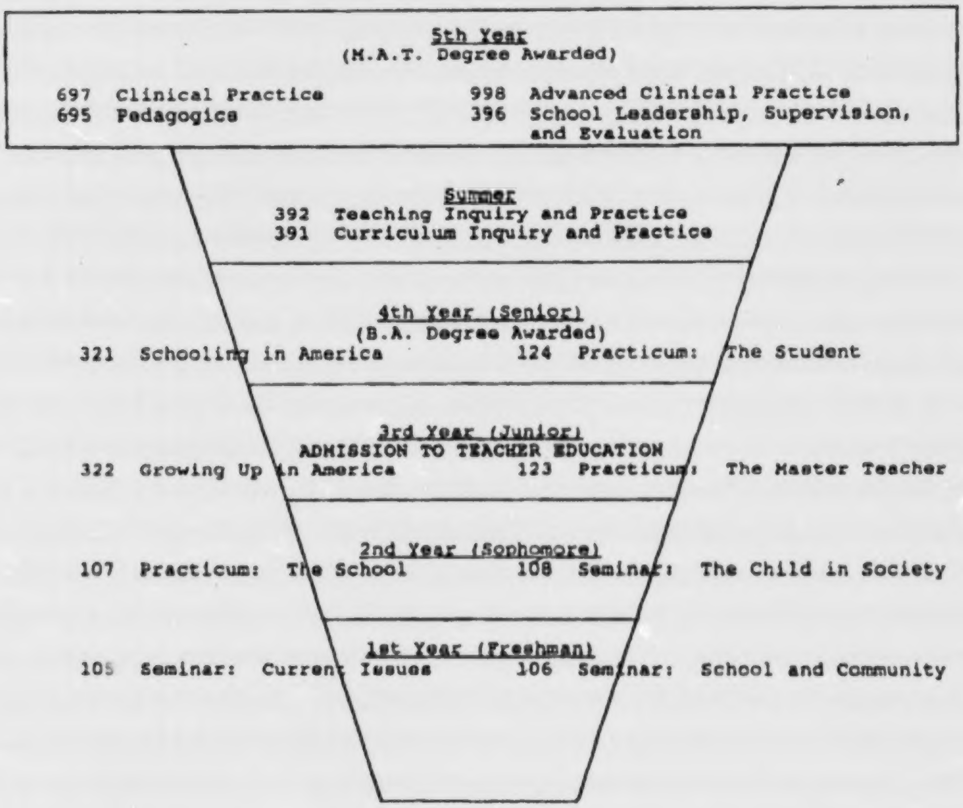
- **Interviews**—Multiple interviews were conducted with each of the Trinity education faculty members. Also interviewed were the president of Trinity University, the respective superintendents of the San Antonio Independent School District and the Northeast (San Antonio) Independent School District, each of the Professional Development School principals, many of the PDS mentors, and a variety of Trinity education students at various points in their university careers (sophomore, junior, senior, and postgraduate year).
- **Document Review**—Various written records were examined, including descriptive program information published by the university and by the Trinity Department of Education, education course syllabi, student transcripts, and program analyses (prepared as published articles) by Trinity education faculty members.
- **Observations**—Classes were observed at each of the Trinity PDSs. In addition, a "walking tour" of each PDS was conducted by the researcher, generally in the company of the school's principal and the Trinity faculty member assigned to that PDS. university education classes, and classes taught by PDS mentors at the Professional Development Schools themselves, were also observed.
- **Surveys**—For purposes of this study, surveys were conducted among a sample of recent Trinity graduates (individuals out of the program two to three years) and among principals who have employed recent Trinity graduates at their schools. Survey responses were tabulated and analyzed, and some of the results are included in this case study.

APPENDIX B: COURSE SEQUENCE

DEPARTMENT OF EDUCATION
TRINITY UNIVERSITY

THE FIVE-YEAR PROGRAM IN TEACHER EDUCATION

FALL SPRING



5th Year
(M.A.T. Degree Awarded)

697 Clinical Practice
695 Pedagogics
998 Advanced Clinical Practice
396 School Leadership, Supervision, and Evaluation

Summer
392 Teaching Inquiry and Practice
391 Curriculum Inquiry and Practice

4th Year (Senior)
(B.A. Degree Awarded)
321 Schooling in America
124 Practicum: The Student

3rd Year (Junior)
ADMISSION TO TEACHER EDUCATION
322 Growing Up in America
123 Practicum: The Master Teacher

2nd Year (Sophomore)
107 Practicum: The School
108 Seminar: The Child in Society

1st Year (Freshman)
105 Seminar: Current Issues
106 Seminar: School and Community

Course numbers for elementary and secondary programs are the same. Elementary courses carry an E. Secondary courses carry an S.

Students interested in teaching in the secondary schools major in the discipline(s) they plan to teach. Students who plan to teach in elementary schools major in the Humanities.

BEST COPY AVAILABLE

Teacher Education at the University of Virginia: A Study of English and Mathematics Preparation

BY KATHERINE K. MERSETH AND JULIA E. KOPPICH

> *"If we're not doing good teacher education,*
> *we have no reason for existing as an education school."*
>
> David Breneman, Dean
> Curry School of Education
> University of Virginia

INTRODUCTION

Two teachers. Teachers who differ in many ways. One teaches mathematics in a small rural high school about 20 miles outside of Charlottesville, VA; the other teaches English in a large high school in greater Charlottesville. One is male and White, the other female and African American. Two teachers. Teachers so very different.

Two teachers. Teachers who are similar in many ways. Teachers who exhibit an independence of mind, a commitment to inquiry and reflection. Two teachers with a passion for their subjects and a deep appreciation of all students—two teachers working to bring these worlds together. Two teachers who are critical pedagogues. Two teachers. Teachers so very similar.

These two teachers are graduates of the five-year BA/MT program at the Curry School of Education at the University of Virginia. The dual-degree program is a teacher education program in which students simultaneously earn a Bachelor of Arts degree in an academic major and a Master of Teaching degree. Examining their differences and similarities through portrayals of these teachers' classrooms and voices can help practitioners and researchers understand the goals and intentions of the BA/MT program, and the means the program employs to achieve its goals.

To provide an in-depth understanding of the five-year teacher education program at the University of Virginia, this chapter first will display two brief classroom portraits of program graduates. The focus of inquiry will then narrow to two secondary education programs, one in mathematics and one in English education. The goal is to provide a rich understanding of the possibilities of teacher education in a major research university and a detailed view of how this institution, the University of Virginia, is able to maintain an exemplary teacher education program in secondary mathematics and English.

Teaching English at Albemarle High School, Charlottesville, Virginia

On a sunny Wednesday morning in April, Selena Cozart is sitting at a teacher's desk on the side of Room 223 in the west wing of Albemarle High School. It is a school of 1,800 students who reside in Albemarle County, which surrounds Charlottesville, Virginia. Albemarle's student population is 80 percent White, 10 percent African American, and 10 percent "other", including Asian Americans and a few Hispanic students.

While the school is located just outside the city limits, it is fair to characterize the students as coming from a mix of suburban and urban homes.

Selena, who is in her third year of teaching, is instructing a college-preparatory-level class of approximately 25 students who are predominately White, along with a few students of African American descent. Most of the students in this required English class are in the ninth grade. Selena is working with students who are making group presentations on novels they have read. Works include *Annie John, Far from the Bamboo Grove,* and *Somewhere in the Darkness.* Each group has read a different novel. Their assignment is to share the central ideas with their classmates. In turn, classmates who are listening are asked to write a paragraph summarizing the plot of the unfamiliar novels. Selena listens to the presentations intently, careful not to interrupt or offer her own viewpoint. She communicates a respect for student work through an expression of grace and caring on her face and the way she positions her body. The students have her full, undivided attention.

After the third group has made its presentation in a talk- show format, Cozart steps forward and her teaching style comes alive. Immediately, one can feel that Selena has a clear sense of purpose for her work with these youngsters as well as a deep respect for each of them. Encouraging her charges to write their paragraphs, she manages several other tasks at once, including collecting books, checking make-up work, and coaching students in their writing by quickly reading drafts and making direct, focused comments. She undertakes these tasks with equanimity and good humor, matched with a firm expectation about getting the job done. This is a class in which students clearly are expected to learn about novels, their structure, and content.

Students seem comfortable speaking up in class, and the mutual respect between teacher and students is evident. Selena insists that there be no interruptions when students are talking. Indeed, the environment has a feeling of safety, in which all opinions and comments are accorded equal respect.

At dismissal time, when several students get up to leave before she has released them, she gives a low laugh and holds her arms apart in a kind of benediction. They sit down without making a sound. She then makes another gesture that signals they can leave. This is all done without words and yet, the class parameters and the mutual respect between learners and teacher are clear.

Cozart explains that she has worked hard to create a "sense of community" in her classroom. She seems certain of her role and of the structure within the classroom that will help her achieve her purpose. Permeating this culture and structure is a sense that this classroom is a warm, safe, and caring place.

Cozart's interactions with the students and their obvious respect for her reveal a practitioner who is "learner-centered." She is in tune with her students and thinks carefully about the needs of each individual. She stresses the importance of classes with clear goals, but also champions the importance of structured choices, so that students can control their learning. For example, though all must meet a common objective, she allows students to choose groups and partners (unless they show they cannot handle such an option responsibly) and she gives them options on paper topics, stressing that there are multiple ways to reach a stated goal. Selena worries about her "problem children . . . and . . . kids not motivated by grades." She talks about individuals and focuses on them as learners.

Cozart's personal passion for literature is palpable and infectious. She is enthralled by language and is fascinated by it. "I love language," she declares, and indicates that she hopes to help her students share her passion. She works hard to communicate her knowledge and love of literature so that her students will learn to appreciate literature and revisit it later in their lives. However, she is also quick to acknowledge that students need more than passion for a particular subject or genre. They need skills.

Selena is unwavering in her commitment to help her students gain sufficient skills to write well and communicate clearly. Cozart is clear with her students about the need for these skills in the "real world" and seems certain of her purpose. How does she teach basic skills, a topic seen as deadly by many teachers and students?

Cozart focuses on grammar, spelling, reading, and speaking, but not without reference to an overarching purpose—the purpose of literacy—and a hint of her love of language. Invoking a belief in the importance of basic skills and the responsibility of teachers to teach them, Selena states, "I do drill on grammar [but] we talk about what the purpose is of those drills." She also expects her students to spell correctly—spelling matters in the real world, she tells her students—but she also teaches the students how to correct and check their work using dictionaries, spell-checkers, and peer and adult tutors. Her teaching exhibits the influence of a clear

BEST COPY AVAILABLE

and strong philosophical perspective combined with an array of instructional strategies to achieve her purpose.

In addition to her own efforts to act on behalf of the learners, Cozart also pushes others in her school to make decisions that will improve conditions for students. She participates actively in policy decisions about resource allocation in her department and tries to engage other teachers in learning opportunities that she has identified outside of the school. All is done in service to students.

During a discussion with her colleagues about the use of a $2,000 technology grant to her department, she spearheaded a discussion of "what we were going to do [with the money] and how we were going to get there." In this discussion, she wanted her colleagues to be aware of their decision-making process and to acknowledge its implications for students. Cozart is not shy about the power of inquiry and the obligation that teachers have to question what decisions mean for students.

Teaching Mathematics at Fluvanna High School, Palmyra, Virginia

The setting is idyllic, a school nestled in the rolling, green hills of rural Virginia. Though commuters to Charlottesville are rapidly expanding the area's population, Fluvanna High School is relatively small, with 900 students in grades 9-12.

Inside, one room is buzzing with busy ninth graders who are working on strategies for finding the area of polygons without using a formula. Some students are counting square units inside rectangles that they have superimposed on the figures while others are estimating the number of units inside the odd left-over pieces. The 20 students are working at tables in groups of four. Although the atmosphere seems relaxed, everyone is engaged—counting, drawing, writing, and reflecting. Amid this din, it takes a moment to locate the teacher.

After ample time to explore and count, the voice of Bill Daly, the math teacher, is heard: "What is area anyway? What is a formula? What is the difference between perimeter, area, and volume?" The students, drawn from a school population that is 70 percent White and nearly 30 percent African American, look up. "Anyone care to conjecture about a formula for finding the area of a rectangle?" Daly waits with an air of expectation that suggests everyone must, of course, be thinking about these questions. Many of the students appear to be drawn in.

Bill Daly is in his fifth year of teaching after graduating from the BA/MT program at the University of Virginia. He is a man who clearly loves his job. In the span of 90 minutes, Daly displays a virtual clinic of instructional strategies, all seamlessly woven together—small-group work, whole-class discussion, models on the overhead, piles of manipulative materials, sample problems that he makes up on the spot to check students' understanding, puzzling workbook problems, and adaptations of textbook exercises for skill development. The list goes on and on, and seems dizzying to the observer. Yet, curiously, the students do not seem confused—no one seems overwhelmed. Skillfully, all the activities are connected to what has been learned before and what is to come next.

Leaning over the shoulder of one student, which enables him to write so that everyone at the table can see, Daly says, "See, you could divide it up into seven little pieces. Or, you could think of one large rectangle and take out this little piece. Or, you could think of it as a square and three-quarters of another square. Or, you could try breaking it up into other shapes . . . Or . . . ." Eyes and minds are glued to the paper. With a deft hand and a soft word, Daly gets these students thinking about the relationship between parallelograms and rectangles. "What ifs" seem to begin nearly every sentence he says to the clumps of adolescent bodies, book bags, and backpacks.

Bill circulates unhurriedly among the groups, visiting in a friendly, yet purposeful way at each table, inviting—indeed imploring through his eyes and body language—the participation of all learners. Explaining his philosophy, he states, "Kids learn in a variety of ways, so I vary my instructional strategies. I want to see the students be active and engaged." His questions, his expressions, his tone of voice make engagement all but impossible. How does he know he is succeeding? How does he know the students are learning? "I look closely at their faces, their body language, as well as their work," he replies. "I also listen carefully to their conversations around the tables. When they are still talking about the problem after they're done, I know they are engaged and learning."

Near the end of class, he turns to the entire class and asks, with an expectant look on his face, "Why do we care about area?" As the students shout out answers, he listens, grins, and probes the students' thinking more. "Yes, area is all around us," he says, "in buildings, calculating surfaces on a tin can, also pricing is often done by area." By asking the "big scheme" questions, exploring the reasons why mathematics is the way it is, Daly is practicing what he learned and observed in his math methods courses at the University of Virginia. Such explorations, he hopes, will lead the students to love mathematics the way he does.

Beyond these two classrooms, what evidence of success do we have regarding the University of Virginia's BA/MT teacher education program? In the world of practice, how are the program graduates perceived and how do the graduates perceive the program?

PERCEPTIONS OF THE BA/MT PROGRAM

The reputation of the BA/MT teacher education program at UVA is strong, both within the Charlottesville area and in counties across the state. Graduates of the program are a prized commodity: personnel directors want to interview them, principals want to hire them, and experienced teachers, who serve as supervising teachers (called clinical instructors in the program), want to work with them.

"I cannot think of one [teacher from the BA/MT program] who has not been successful," says Ron Hutchinson, director of personnel for the Charlottesville Public Schools. Hutchinson finds the graduates articulate, well-rounded, and of high caliber.

The reputation of UVA graduates at the school site is positive as well. One principal, in response to a question as to whether recent UVA graduates stood out from other faculty in any particular way, wrote of a young teacher, "She is the most outstanding first-year teacher I have observed. She is creative, organized, professional, and demonstrates a clear understanding of the instructional process and student needs."

Another principal of a public, urban, elementary school rated UVA graduates as "very well prepared" and added that, "UVA's five-year program has made a huge difference. All of the student teachers we have had have been good to excellent." On the survey conducted for this study, nearly 75 percent of principals reported that UVA teacher education graduates were "very well" or "well" prepared for their teaching responsibilities.

Experienced school professionals also acknowledge the powerful influence that high quality, well-trained young professionals can bring to an experienced staff. Curry graduates often assume leadership positions in their schools: Selena Cozart posted notices about a national letter writing project for her colleagues; Bill Daly was elected to serve as department chair. A local principal wrote of a recent UVA graduate that the teacher was "one of the finest young teachers I've ever seen in all areas . . . . She served in a leadership capacity for staff development and community relations with great success."

Curry students bring new ideas, new approaches, and new energies to teaching. An experienced social studies teacher at Charlottesville High School who had supervised many students from the university observed that UVA, "is producing teachers who are able to go into a leadership role. We can count on them and we know what we are getting." Experienced practitioners value these young people (98% of the BA/MT graduates responding to the survey were under the age of 36) as they join their staffs, share the latest techniques, and bring energy to existing programs.

Graduate Satisfaction

Satisfaction with the BA/MT program is also very high among program graduates as reported on the survey. Asked if, given the opportunity to be part of a teacher preparation program again, they would choose the University of Virginia, 68 percent of 1993-1995 program graduates said, "Definitely yes"; another 26 percent said "Probably yes." This combined affirmative nod from 94 percent of the respondents is noteworthy and buttressed by additional findings.

More than three-quarters of survey respondents (78%) either agreed or strongly agreed with the statement: "A lot of my ideas about teaching and learning come from what I learned in my teacher preparation program." Overall, 84 percent of the responding graduates felt that the UVA program prepared them well or very well for teaching. Such high regard for a teacher preparation program is impressive given that the positive "halo" effect of teacher education programs, which often seems less apparent once teachers are in their own classrooms, seems to have lasted with this group of Virginia graduates.

Central office administrators, principals, and fellow classroom teachers all spoke of the commitment that graduates from the UVA BA/MT program have to the profession. This commitment was described in various ways.

Ron Hutchinson, the director of personnel for the Charlottesville Public Schools, observed that program graduates "truly want to be teachers . . . they are there because they want to teach and because they believe that all kids can learn." A clinical instructor who works with students in the program at the Walton Middle School outside of Charlottesville was "impressed with the seriousness of purpose" of the UVA students while another teacher noted that, "Curry students know they want to be teachers."

The commitment of the prospective teachers also extends to a belief that the university and the program itself are committed to teaching and to children. Both the program structure and the individuals who work in it communicate the "clear commitment of the University and the students to teaching," according to this same middle-school teacher. "Consistency" and "commitment" are the words local practitioners use to describe the program and the qualities it instills in the teachers it prepares.

Characteristics of BA/MT Graduates of the University of Virginia

What capacities for teaching and teachers does the BA/MT teacher education program impart? And more importantly for the reform of teacher education, how does the program develop and support these capacities? What characterizes BA/MT graduates of the teacher education program at the University of Virginia?

Looking within these two classrooms and across the data and observations from practitioner colleagues, several common characteristics of the BA/MT program graduates emerge, including:

- Strength in subject matter-knowledge;
- Strength in pedagogical knowledge and a learner-centered philosophy;
- Habits of reflection, inquiry, and independence of action; and
- Sensitivity and skill in building a community of learners.

What structures and organizational features of the BA/MT program help foster these characteristics?

Strength in Subject-Matter Knowledge

In their classrooms, Selena Cozart and Bill Daly demonstrate extensive subject-matter knowledge in their work with children. Reputational data about UVA graduates confirms that these two teachers are not unique. UVA-trained teachers generally are reputed to be well grounded in subject matter. How does the program achieve this distinction?

Program Requirements

This strength is due first, and perhaps foremost, to its structure. The five-year teacher education program at the University of Virginia provides students with the opportunity to earn both a Baccalaureate and a Master's degree and licensure to teach. Students pursue their undergraduate liberal arts studies concurrently with the exploration of professional studies. However, students must meet all of the requirements of the Bachelor of Arts degree. This degree, according to the university catalog, is intended to "introduce students to a broad spectrum of knowledge and is intended to allow them to develop the skills and habits of learning, disciplined thinking, and articulate expression."

The first two years of undergraduate work are designed to help students develop knowledge and skills associated with a broad range of academic disciplines including natural science, social science, humanities, foreign language, English composition, and fine arts. In the third and fourth years, students are expected to pursue one or more of these fields in greater depth and to declare an academic major in one of them.

At the time of their application to the introductory course of the teacher education program (usually at the end of the freshman year), students must present a plan to take a distribution of courses, as part of the College Core Program, that will be completed during their first two years of study at the university. This includes 12 semester hours in the natural sciences and mathematics, 10 hours in historical studies and social sciences, six hours in the humanities, including literature, arts, philosophy, religion, and music, a demonstration of proficiency in a foreign language either through course work or a placement test, evidence of skill in English composition, and one semester hour in physical education.

All of these courses are taught in the College of Arts and Sciences and are part of the undergraduate core requirement for all undergraduates at the University of Virginia. Thus, any individual intending to pursue a teaching credential, whether at the elementary or secondary level will meet these university-wide standards for the liberal arts degree. Further, all students preparing to teach at the secondary level, must maintain a major in a subject-matter field. It should be noted that most students preparing to teach at the elementary level also choose a subject-matter field for a major. And, most individuals preparing to teach special education choose a major in psychology.

As an example of the rigorous requirements, a secondary teacher of English must take 32 credits, at a minimum, in upper-division English courses, including:

- An eight credit history of English survey course;
- Six credits in literature written before 1800;
- One course each in Shakespeare, American literature (pre-1900), 20th-century American literature, the novel, poetry, and history of the English language; and
- Three courses offered in the school of education: pedagogy of English language instruction, teaching composition, and literature for adolescents.

In addition to the 32 upper-division English credits, students must take at least six credits of graduate courses in British or American literature. Further, students are strongly advised to take at least one course in creative or non-fiction writing, women's studies, linguistics, and African American and other minority culture literature, as well as course work and experience in theater, cinema, and visual and print media.

Requirements in mathematics are equally demanding. Students must complete a major in mathematics that includes at least nine courses above the calculus sequence. Two of the nine courses must be completed at the graduate level. All students who intend to be mathematics teachers must enroll in at least three credits of computer science and three credits of educational computing.

Completion of these requirements tends to produce English and mathematics teacher education students who possess a deep understanding of their chosen disciplinary field. When combined with the core requirements for all undergraduates at UVA, these requirements produce prospective teachers with outstanding liberal arts backgrounds.

The program also requires students to pursue their BA and MT degrees simultaneously over four years of the five-year program. This creates a situation in which students are continuously taking courses in their subject fields while pursuing professional studies.

Though students in their freshman and sophomore years have not yet declared an academic major, and will not formally be admitted to the teacher education program until the beginning of their junior year, they must complete a "permission to enroll" in the first course of the dual (BA/MT) program by the mid-point of their second year of college. This requirement begins to build the linkage between professional and academic skills. Taking advanced courses in specific disciplines concurrently with professional studies keeps the importance of subject matter foremost in students' minds. Ongoing communication between Curry and liberal arts faculty helps integrate disciplinary studies with professional courses. This encourages students to explore disciplinary knowledge in depth and to explore ways to translate that knowledge immediately into secondary education settings.

The link between the B.A. English program and the M.T. English Education program is a strong one. As in all subject-specific majors, the English major for teachers-in-training was formulated jointly by faculty in the academic department and the Curry School. Faculty from the English department in the College of Arts and Sciences and the Curry School co-advise students.

The strongest bridge connecting the English department and the English education program is formed by the UVA Writers Workshop, which serves both as a teacher-training forum for English education students and a source of jobs and internships for English students in the Masters in Fine Arts program. Students and faculty in both programs gain an appreciation of one another. Moreover, English Department faculty come to respect Curry School faculty as they witness the enhanced pedagogical skills in their students.

Indeed, the only time during the program that students are not concurrently taking courses in the College of Arts and Sciences and the Curry School is the fifth year when students are in the schools all day participating in the full-time teaching practicum, called the Teacher Associateship. Even during the last semester of the program (spring of the fifth year) students return to the College of Arts and Sciences to take courses in their subject matter field—typically the two graduate level courses required as part of their MT degree.

The advising structure also accounts for a dual focus on liberals arts and professional studies. Students declare their academic major at the beginning of their junior year and at that time are assigned two advisors: one in the teacher education program and one in their academic field. These advisors confer about student progress and scheduling. Particularly in the area of mathematics, there appears to be good coordination between the education faculty and the members of the mathematics department in the College of Arts and Sciences, with constant exchanges and communication.

High Standards

Beyond the structural design of the program, high and rigorous standards are another element ensuring that program graduates will possess a strong grounding in subject-matter knowledge. Students in the BA/MT program successfully meet several rigorous academic admission criteria.

The first review is for admission to the University of Virginia as a freshman. Students who enter UVA must have strong academic records. As the UVA Undergraduate Record, the university catalogue, states:

> Demonstrated academic achievement in a challenging secondary school program is normally the primary criterion for admissions to the first-year class. Outstanding grades, high rank in class, good performance in Advanced Placement and honors courses, and superior standardized test scores all help establish such a record. (p. 6)

Standardized test scores of applicants to the university indicate that UVA is a highly competitive undergraduate institution. Combined SAT scores are in the 1200-1400 range.

In March of the freshman year, potential teacher-education students must complete a "permission to enroll" application. This application requires a complete transcript, SAT scores, and responses to four essay questions that describe the prospective teacher's goals in education, personal and professional experience working with children, personal strengths, and commitment to continued learning. Applicants are also asked to reflect on any obstacles that might inhibit their ability to participate fully in the program. In effect, applicants are asked to make a written commitment to pursue the requirements of the dual-degree program. Once granted "permission to enroll," students are able to enter the introductory education course, "Teaching as a Profession," and to register for a one-semester-hour field experience and computer lab course.

At the beginning of the third year, students formally apply to the teacher education program, assuming they have completed the introductory course and field experience successfully, declared a major in the College of Arts and Sciences, and demonstrated continued competitive academic performance. UVA's teacher education program is competitive and can afford to be selective. From 1993 to 1996, the program received an average of 150 applications annually, granting enrollment to approximately 60 percent. Professional studies during the junior year include three core-program courses and one field experience. Finally, at the beginning of the senior year, the teacher education program further selects candidates from this already strong pool for the dual-degree program by requiring students to complete a formal application for "Advancement to Graduate Study" at the Curry School. Criteria for advancement include:

- Satisfactory performance in all field experiences;
- Demonstrated competence in basic skill areas—verbal, quantitative, and computer skills;
- 2.75 grade point average in overall academic and professional studies;
- 3.00 grade point average in the academic major;
- One letter of recommendation addressing potential as a teacher; and
- Satisfactory performance on the Graduate Record Exam.

Between 1992 and 1996, just over 62 percent of those taking the first professional course actually completed the teacher education program.

The following statistics for the class of 1996 give an additional indication of the caliber of the graduates of the program: For these graduates, average SAT scores were 562 (verbal) and 598 (math) for a total of 1,160. Overall grade point averages of 3.25, with grade point averages in their majors of 3.23, and an average GRE score of 528 (verbal), 590 (math), and 607 (achievement) complete the test-score profile. This class was composed of 72 students, 34 at the elementary level and 38 at the secondary level—six in English, three in foreign language, six in mathematics, one in physical education, four in science, eight in special education, and 10 in social studies.

Although grade point averages and standardized test scores are not the only measure of academic achievement, the fact that UVA teacher education students possess strong backgrounds in their particular subject fields is undeniable.

This strength has not been missed by local administrators. A former superintendent of the Charlottesville Public Schools commented, "[UVA graduates] are very strong in content." In particular, she noted, a special expertise among graduates in reading, language arts, mathematics, special education, and technology. "The reading and math program at UVA is known all over the state," she said.

Praise for UVA graduates' preparation extends to the Arlington Public Schools. Arlington has employed UVA graduates in all subject areas, from early childhood to social studies, and mathematics. Commented a representative of Arlington's Personnel Division, "[UVA graduates] come to us with the latest teaching techniques and an immense background in technology in the classroom."

Strength in Pedagogical Knowledge and a Learner-Centered Philosophy

In his teaching at Fluvanna High School, Bill Daly shows that he is a master at engaging his students in mathematics using multiple techniques and strategies. In the lesson described earlier, ideas tumbled out of Daly's mouth giving students ideas to consider about ways to regroup the diagram pieces, alternative approaches, and the "what if" possibilities. Daly declares that he has always loved math, even when he was a chef and a house painter prior to his teaching career.

When asked how he can find so many ways to teach so many different kinds of students, some of whom love mathematics and some of whom do not, he replies, rather casually, that he reads about and tries many various approaches in order to understand them better. Each time he reads the National Council of Teachers of Mathematics standards (something he does each summer), he says he finds new ideas or approaches. Daly also is a frequent workshop participant and attends as many professional conferences as he can.

Daly credits the teacher education program at Curry with providing him with skills that now enable him to develop new strategies continually for dealing with students who are "different", including special education students. The secondary mathematics education program at UVA did not, says Daly, give him a set of recipes or a "bag of tricks." Rather, he credits Joe Garofalo, a UVA mathematics education faculty member, and his field experiences with showing him "the big scheme of things." Through these experiences in the program, Daly "learned so much about my subject, ways to teach, where to go" that he now can expand his strategies by knowing "where to look."

Initially, Daly said, he was disappointed that he did not have a complete set of lesson plans to teach certain common mathematics topics. This is not an unusual reaction for a beginning teacher. But now, he says, "The longer I've been out, the more I appreciate what Curry and Joe

Garofalo did. Things that were started there are coming to fruition. The Curry School planted a lot of seeds."

Garofalo is a pioneer in the design of activities and use of the graphing calculator for teaching mathematics. In addition to designing and developing mathematics lessons that are made available on Virginia's Public Education Network (PEN), Garofalo also engages his students in graphing-calculator activities in his courses. These kinds of experiences showed Daly how to acquire new skills and how to grow continually as a professional.

Daly's appreciation for the program at the Curry School is shared by other graduates. Gretchen Merritt, currently teaching at William Monroe High School in Greene County, Virginia, is a five-year veteran teacher and a graduate of the UVA BA/MT secondary math education program. She comments that, "Somebody who comes out of the Curry School is going to be able to walk into a classroom prepared for almost anything. They'll be knowledgeable in the subject area, knowledgeable in a variety of strategies of teaching methods, of classroom procedures and discipline."

Gretchen's praise for the ability of UVA's teacher education program to help teachers learn a wide repertoire of instructional strategies is shared by teachers in English. Jenny Mullen, a second-year teacher and 1994 graduate of the BA/MT program now teaches at Louisa County High School. She asserts that the program helped her develop a "wide" repertoire of instructional strategies and comments particularly on the opportunities she had to teach her peers and receive feedback on her own teaching.

Watching these UVA-trained teachers teach and hearing others describe the distinctive characteristics of Curry graduates, one notices time and again that program graduates use a wide array of pedagogical strategies to create learner-centered classrooms. An array of instructional strategies combined with a focus on children is an essential element of effective teaching.

Field Experience

What aspects of the teacher education program foster the development of these skills and this perspective? As teachers talk about their classrooms and their experiences at Curry, the extensive field-experience component of the program and the subject matter methods courses in the certificate fields of secondary English and mathematics rate high as contributors.

Beginning in the sophomore year, students in the teacher education program participate in an extensive array of field placements designed to expose them to various elements of teaching. During this year, all prospective teachers, regardless of their intended level of teaching, observe in both elementary and middle schools.

The focus of this initial work is more on school organization and less on individual classrooms. Students are asked to interview teachers, students, and administrators to learn about professional roles in schools, to experience a variety of settings within a school (including the library, media center, special-education classrooms, and the principal's office), and to observe formal instruction in regular and special-education classrooms. Students spend approximately 25-30 hours each semester in such placements.

During the junior year, the focus of field placement is on individual learners. Coupled with the courses "Learning and Development" and "The Exceptional Individual," which provide basic knowledge of learning principles and human development, the field experience requires students to serve as tutors. Particular emphasis is placed on working with students with special educational needs.

Students also observe and assist in classrooms while developing an extensive written study of an individual learner. Students spend approximately two hours per week at the school site, including a 45-minute session in which they tutor individual students. After their visits, students prepare a weekly report on the tutoring sessions as well as an extensive child/adolescent study based upon principles developed in courses at Curry.

In the fourth year, field experiences require that students observe, describe, and analyze teaching and learning behaviors in the classroom, develop and teach model lessons in peer sessions and in the classroom, identify an organizing theme for a unit of instruction, and develop the unit and teach it in a classroom. Students spend approximately two hours per week in the fall and two weeks in the spring in the classroom.

This work in the classroom is directly related to the student's academic major and areas of certification and is undertaken concurrently with a two-course sequence of general methods, focused on instruction, assessment, and classroom management, in which students often practice techniques they will use in their field placement. Finally, in the fall of the fifth year, candidates student teach full-time as "teacher associates" in the classroom of a veteran supervising teacher. In the spring, they take further graduate coursework while continuing in their field placement. Students' field experiences are closely integrated with course work at the university, facilitating continual transfer of theory to practice and practice to theory.

This progressively more complicated and intense work with learners combined with course work offers Curry students opportunities to develop well-grounded theory about learning and learners. By the time students are ready to embark on student teaching, they have had extensive well-structured opportunities to observe teachers and learners in the field and have already taught lessons and at least one unit under the supervision of an experienced classroom teacher, the university special methods faculty member, and a graduate student supervisor. As one program graduate recalled, "Time in the classrooms was key; actively participating with kids for four years is the best way to prepare teachers for teaching."

The influence of these well-structured field experiences on those who are learning to teach is evident. One student observed, "I really liked the way every year you are put into a school some time or another to observe or to tutor or to teach. . . . Having had the communication with the students, I can assure you that if I hadn't had a touch of that at every point in the four years of the five-year program, I would have given up long ago, because the reason I want to be a teacher is to deal with children." Another student observed that, "The single biggest advantage of the BA/MT is that I have been in a school every semester of the program."

The UVA BA/MT program fosters a child-centered focus in its graduates. These teachers exhibit a concern about individual children that is central to the teacher education program and frequently identified by external observers. A former superintendent of the Charlottesville Public Schools sees this quality in UVA BA/MT graduates. This former leader of a diverse 4,400-student district observes that the graduates, "know whp we have in our schools. They are particularly well-prepared to work with the urban child. . . ."

Through field experience, graduates have multiple opportunities to work with diverse learners in diverse settings. The "early and often" aspect of the field experiences throughout the program affords students an opportunity to observe many teachers and amass a range of instructional techniques. Further, the individual tutorial experience with an "exceptional learner" encourages students to focus on the perspective of these students and the particular challenges they face. Through first-hand expe-

BEST COPY AVAILABLE

riences in multiple settings and structured reflection, students are exposed to alternative methods and a range of instructional strategies.

Course work

In addition to field experiences, courseware at the University plays an important role in developing knowledge of multiple teaching strategies in program graduates. One example can be found in Joe Garofalo's courses, "Teaching in Secondary Mathematics" and "Seminar in Mathematics Teaching."

From the first day in each of Garofalo's courses, students reflect on the nature of mathematics, why mathematics is taught, what it means to teach mathematics, and how mathematics should be taught. Another explicit goal of Garofalo's courses is to introduce students to new thinking and reforms in mathematics education. Finally, the activities in these courses are explicitly designed to develop multiple pedagogical techniques and strategies.

Garofalo's style is infectious, the modeling is deliberate. He starts nearly every class with a mathematical problem for everyone to try. He believes that one effective way to encourage students to think about mathematics is for them to do mathematics. Garofalo's course problems are challenging and thought provoking and offer opportunities for students to discuss their approaches and understandings and to reflect on their feelings and beliefs about the subject or a particular topic. "Have you ever been lost in a math class?" he asks a group of prospective teachers. "How did it feel? What did you want the instructor to do?"

Garofalo intentionally exposes students to many different resources, ideas, techniques, and models of instruction. Of 15 class sessions in his "Teaching Secondary Mathematics" course, more than a third focus explicitly on particular teaching strategies, including those grounded in technology using new software and graphing calculators. For these sessions, students work in small groups to develop their presentations and then teach excerpts of these lessons to their classmates and the instructor. Peers and Garafalo critique the presentations.

However, as Bill Daly observed about his experience at Curry, Garofalo's courses do not impart a "bag of tricks." Rather, they stress the development of multiple strategies and the ability to match them to student needs. The focus is on both the instructional technique and the learner. Even on Garofalo's final exam, one detects an explicit effort to connect these ideas when he asks students to:

- List three different heuristic strategies which you believe would be helpful to teach students taking algebra and explain how and where you would teach these strategies in an algebra course;
- List three different control strategies which are important in problem solving and tell how and when you would teach them to students in an algebra course; and
- Discuss why or how teaching heuristics without addressing aspects of control is less than adequate.

Garafalo's "Teaching Mathematics" course does not offer predigested recipes for teaching mathematical topics such as computing area, solving linear equations, or taking a derivative. Instead, the course offers students a way of thinking and a method of analysis designed to match student needs with a repertoire of instructional methods and resources.

The BA/MT secondary mathematics education program at UVA seeks to develop a way of thinking in program graduates that empowers them first to consider their students and then to apply strategies, techniques, and methods of reflective inquiry that they have observed modeled in their classes at UVA to respond specifically to these students. Through instruction and modeling, the program first offers these prospective teachers the tools and techniques to focus on their students and then to use this child-centered focus in instructional activities.

The experience of English teachers in the BA/MT program parallels that of the mathematics teachers. In Margo Figgins' "Teaching English" course, offered during the spring of the fourth year prior to the student teaching placement, students discuss multiple strategies, techniques, and approaches to teaching English. In one evening session toward the end of the semester, a student leads the class in analyzing a piece of political rhetoric, establishing a careful map of the semantic environment using an instructional technique called a "ladder of abstraction." The 13 students in the class discuss the perspective of the writer, the audience, and the purpose of the statement. The quality of discourse is very high, the students are deeply engaged.

Figgins' skill as a teacher is evident. She motivates her students, drawing out from the students different ways that a particular exercise could be undertaken with their own classes. She emphasizes the importance of audience (the learners) and tells her students that the purpose of analyzing a piece of political rhetoric is "so that you can think about how you'll approach similar tasks with your students."

Two objectives from Figgins' course description make her intent to develop and model multiple instructional techniques clear: 1) To identify one's teaching competencies as a means of setting individual goals that will further one's development as an effective English teacher; and 2) To apply theories and recommended practices from the reading toward the development of a defensible pedagogy.

Much more than a didactic demonstration of pedagogical techniques is on display in English education classes at UVA. Both Figgins and her colleague, Joe Strezpek, who teaches the seminar that runs concurrently with student teaching in the fall of the fifth year, press students on their rationales, asking why they suggest and take certain approaches or interpretations. Indeed, in addition to modeling multiple techniques and matching these techniques with individual learner needs, much of the work in the secondary English and mathematics teacher education program at UVA is based on the assumption that it is important for the students to know themselves and their beliefs as well as the research in order to effectively design and use multiple instructional tasks for others.

Habits of Reflection and Inquiry

Selena Cozart is a reflective teacher who practices the discipline of inquiry about her practice on a daily basis. While teaching students at Albemarle High School, she thinks about who she is, how she was taught, and how she wants and needs to teach these particular students and why. She questions her own practice, identifying, and testing assumptions about students, methods, curriculum, and assessment. "I reflect on what I teach, how I teach. . . not just in a practical sense, but why we do what we do." She explains that she finds herself questioning the rationale of the canon, not for the sake of opposition, but rather because she wants to understand it better. "Why is it,." she asks, "that certain books have particular value?"

English teacher Maria Morelli, who graduated two years ago from UVA's BA/MT program and now teaches at Charlottesville High School, credits the teacher education program with "training [me] to take a reflective stance." She believes that education should work toward social change and appreciates the fact that the Curry School helped make her more aware of the implications of race and class for education and the world.

How are these "habits of inquiry" developed? What programmatic elements contribute to the emergence from the secondary mathematics and English programs of critical pedagogues? A number of program elements contribute to the development of this perspective among BA/MT graduates.

Early, well-structured field experiences, coupled with introductory course material, start students on a path toward reflective practice. However, few program elements are mentioned as frequently by graduates as Margo Figgins' methods courses for secondary English.

In light of her objectives in the "Teaching English" course, Figgins's emphasis on reflection and self-inquiry is clear. Among 12 objectives stated for the course, the syllabus lists the following:

- To identify one's own personal goals within the parameters of the course, aimed at satisfying one's perceived developmental needs;
- To develop greater competence in self-expressive, artistic modes, e.g., personal storytelling, creative movement, drama, poetry, journaling;
- To assess one's own teaching competencies as a means of setting individual goals that will further one's development as an effective English teacher; and
- To use autobiographical writing as a tool for self-reflection and a method of response to literature.

This course consciously exposes students to self-inquiry and reflection. To develop autobiographical writing skills, for instance, Figgins asks students to read an autobiography of their own choosing, limiting the students only to a work written by a particular artist.

Figgins explains this choice by noting, "I would like to explore the premise that curriculum is autobiography. Further, because it is written in the first person, the person will be speaking directly about the experience of his/her own life (as opposed to a second party presuming/interpreting the meaning). . ." Figgins also explains the artistic emphasis of the book, stating: "We have adopted the teacher-as-artist metaphor (with classroom as studio and student as creator) to more efficiently serve the social value of English studies and to be more consistent with the principle of developing students who can create their own educational experiences. Pedagogy courses build on the notion of students as makers of

BEST COPY AVAILABLE

meaning who are engaged in the process of constructing knowledge and negotiating meaning."

For the autobiography assignment, students are asked to record as they read, and to note those sections that hold particular meaning for them. Figgins then asks them to choose a dominant theme from their notes and "develop a short literary piece." She urges students "to experiment and keep the purpose of the writing in mind: to dramatize for your reader how that theme is expressed and developed."

A week later, students are asked to develop a second piece based on another dominant theme identified in their readings. In this assignment, however, Figgins asks students to create a paper "that departs dramatically from your first one" but which accomplishes the same purpose. This work leads to students describing their own situations, analyzing them for their connections to the literary pieces, and ultimately discovering a dialectical relationship with the artist's life. Finally, each student writes and performs a script which illuminates how their life and the artist's are joined.

In this exercise, Figgins believes that students gain a deeper understanding of who they are, what they believe, and why. "The students," she says, "develop a heightened awareness of the context which they bring to the classroom which they, in turn, can draw on to facilitate similar awareness in their students. This constitutes the basis for more authentic relationships in the classroom."

Maria Morelli, the second-year teacher at Charlottesville High School, reflected on the impact of these and other such exercises on her image of herself as a teacher and as a professional. She credits Figgins and the UVA program with helping her see herself for the first time as a writer. But she also notes that she was exposed to many techniques for responding to student writing at the same time she was thinking about her own perspective.

In the autobiography exercise, Figgins accomplishes two goals. She models a technique that can be used in a classroom to analyze a text, and she encourages her future teachers to engage in critiquing methods which foster their own learning and growth.

A second activity that Figgins uses to focus students on their own thinking and reflection is the development of a list of "What's worth knowing?" as a teacher of English. She encourages students, as part of the assignment, to list what "you think you need and/or want to know at this point in your preparation in order to create a classroom in which both you and your students experience success." Students are asked to bring these lists to class to share.

Many of the student lists evidence deep self-inquiry, reflection, and a child-centered perspective. For example, one student asks, "How can I be a 'subversive,' questioning, inquiry-focused teacher and still cover the required curriculum?" Another inquires, "How do I deal with student interests and inquiries that morally/physically contrast sharply with mine?" In these questions, the prospective teachers are inquiring about their own beliefs and practices as well as those of their students. A third student asks a difficult question about teacher beliefs and the teacher's role in the classroom: "If I hold strong convictions about religious/political/controversial issues, how much can/should I allow these views to be known in the classroom?" These questions become the basis for shaping the weekly syllabus which guides students' ongoing inquiry.

Figgins explicitly uses critical pedagogy as a model for preparing new teachers. She sees "teaching as a political and critical act. . . one that is not neutral," and she seeks, through the design of her class experiences, to develop teachers who are also critical pedagogues. One objective from her syllabus illustrates this perspective: "To become more aware of one's learning and teaching preferences in order to develop a more conscious use of varied instructional methods which result in students' cultural production (as opposed to reproduction)."

By modeling instructional practices within her classes, where the prospective teachers and faculty members engage in authentic dialogue and reflection and interrogate the relationships among literature, language, and literacy, she encourages her students to determine for themselves what, why and how they want to learn. Figgins also makes explicit the role that power plays in determining the extent to which teachers can act on their understanding. As a result, the students are led to consider the politics of schooling and the implications of developing a "liberating pedagogy" in a contemporary education system.

Figgins makes a deliberate effort to inject consideration of matters of race and class into her instruction. She includes these issues because she observes that most English teachers have been educated in the "traditions of the dominant culture." She says, "They expect to be taught as they have been taught and to learn how to teach in the same way. And they can only imagine teaching students like themselves." Yet, Figgins understands that these new teachers will encounter many students who come from backgrounds and have experiences quite different from their own. They need to learn how to "read" their students so that they are able to instruct in ways that are meaningful to and respectful of all of their students.

Evidence of Figgins's efforts to include multicultural awareness and issues of race and class can be found in the books she asks her students to read. They include Freire and Macedo's *Literacy: Reading the Word and the World;* Kutz and Roskelly's *Unquiet Pedagogy: Transforming Practice in English Classrooms;* Deborah Stern's *Teaching English So It Matters;* and Mike Rose's *Living on the Boundary.* These texts explore issues of race, class, and multiculturalism from multiple perspectives and help guide the thinking and development of these future teachers.

Habits of reflection and inquiry are developed and supported in other parts of the BA/MT program as well. Starting with the first introductory course, "Teaching As a Profession," students examine schools as a reflection of society. The course description makes this perspective and its rationale clear: "Schools are a reflection of the society in which they exist, and future teachers need to analyze the effect that social and political issues have on the day-to-day life of schools."

The syllabus also states a desired outcome of the program: "By the end of this class, you will become familiar with the important issues associated with teaching as a career choice and be able to examine schools from the perspective of a teacher rather than a student. You will be able to describe schools in a non-biased and reflective manner and will be able to identify the problems and possibilities of schooling in our society."

The Field Experience Component

The field experience component of the BA/MT program also helps develop a "reflective stance." In the spring of the junior year, from February through late April, students work on a weekly basis with an individual student. Prospective teachers tutor individual children, meeting the students at least eight times during the semester. In addition to tutoring, the prospective teachers must complete the student-focused case study previously described, in which they summarize and interpret the student's progress, the impact of their own actions, and the student's influence on the way they conceptualize the job of teaching.

Students receive very detailed instructions about the necessary elements of a case study and how to prepare one. In many respects, this experience imparts skills in qualitative research methods. For example, the assignment reminds students to "ground your answers in the data you've collected in your weekly notes" and gives specific directions about coding and interpreting data. In the final case analysis, students must address the following questions:

- What information did you receive from the classroom teacher about the needs and abilities of this student and how did you address these needs?
- In what ways were you more successful? less successful?
- Did you discover any new problems during your work with this student? What more would you like to know if you were continuing with this student?

Case studies also contain an analysis of the student's environment, including his or her home and school environment, relationships with peers, and classroom behavior. In addition to providing a description of these elements, students also are asked to reflect on their strategies and assess their effectiveness.

Another element of the program that imparts the importance of reflection and inquiry is the Field Project in Education. Taken in the spring semester of the fifth year after the fall semester of student teaching, this course requires that students explore problems or questions of interest identified during their fall teaching experience. Supervised by program area faculty, a clinical instructor, and a university supervisor (usually a doctoral student), the students develop their questions and then conduct the research.

Through this exercise, aspiring teachers develop research skills that will accompany them into the classroom. Over the last few years, the project has expanded from just research, to include service projects involving local schools. Recent projects have included providing in-service technology training to area schools, producing educational television programs for mathematics, analyzing proposals for new curriculum standards, and creating teaching cases based on students' teaching experiences for use in the teacher education program. Many of these projects have been published by the ERIC system.

Taken together, these elements of the teacher education program contribute to the development of a "reflective stance" about teaching. In addition to tutoring a child, examining the nature of an autobiography and its influence on one's teaching persona, or identifying and exploring a vexing

BEST COPY AVAILABLE

problem of practice, the program is designed to constantly ask prospective teachers to examine their experiences and assess their performance. "Teachers must develop habits of inquiry," say former Curry School Dean James Cooper, one of the original designers of the five-year teacher education program. Reflection on practice and questioning of assumptions begins early in the BA/MT process and receives constant reinforcement.

Sensitivity and Skill in Building a Community of Learners

Throughout UVA's mathematics and English teacher education programs, there is a constant emphasis on creating classroom environments that support learners and respect individual differences. The programs and the elements within them, ranging from the introductory course offered in the sophomore year to the subject-specific seminars accompanying student teaching, stress the importance of community. Caring communities of learners is an outcome that many math and English education graduates strive for in their classrooms. The classroom of Selena Cozart offers an excellent example.

Observing Selena for only a few minutes reveals her obvious warmth, caring and respect for diverse opinions. Cozart works hard to create a caring community in her classroom and acknowledges that her efforts are a conscious attempt to reproduce the kind of community she experienced at the Curry School. There, she says, professors worked to create a strong, caring community that respected diversity. As a member of the secondary English cohort in the BA/MT program, being a part of a strong, supportive community was a key experience. Because of her positive feelings about this experience, Cozart is determined to replicate a celebration of diversity and sense of community in her own classroom.

In addition to Cozart, other graduates, faculty, and graduate supervisors describe the program culture as one that is "supportive" and "caring." Interviews with student teachers (conducted by doctoral students taking a course in educational evaluation) emphasize this theme. One teacher commented with regard to the program,

> I really enjoyed it. I think they stress things such as working together and listening to each other, trying to make us work together. . . . My experience here has shown that when I confer with other teachers or other student teachers and exchange ideas

> and problems. . . I seem to have a better time handling the situations that come up that I was not prepared for. So, I definitely give the program high marks for stressing that.

A graduate supervisor, asked to describe distinctive characteristics of the program, observed that the "atmosphere here is one of mutual support." Indeed, this supervisor helped create this supportive, interconnected community by attending the English methods course in order both to acquaint herself with the students she was supervising and to better understand the philosophy and perspective imparted by the instructor in the course. The participation of many supervisors in such courses also results in an additional benefit since many of these graduate students aspire to positions in teacher education. Their participation in the full program affords them an excellent opportunity to witness strong, coherent teacher education.

From the beginning of the program, with the course, "Teaching As A Profession," explicit efforts are made to develop a culture of mutual caring and support. Susan Mintz, one of the instructors of this course, asserts that UVA's program is about "intellectual caring, not just to the kids, but to each other."

An example of the way in which the English and math secondary education programs develop this sense of community and the desire among its graduates to recreate such environments in their classrooms can be found in the way the faculty envision the program. Asked to describe the flag or banner that she would use to characterize her classes in secondary English at UVA, Margo Figgins declared: "Colleagues constructing classroom communities, stimulating self-directed learning, and celebrating the strengths inherent in classroom diversity."

In nearly every one of her actions, Margo Figgins embodies this credo. She considers the creation of a learning community respectful of individual diversity the *sine qua non* of teaching. From the opportunities she offers her students for individual consultations—"Conferencing works better when there's something motivating the talk . . . I will expect you to schedule a conference with me when you have a concern with which I can be helpful"—to the research she conducts on her own practice and its effects, Figgins works to create a caring, supportive community that honors individual differences.

Students in her classes who develop lists of "What's worth knowing?" probe issues of community building and question the appropriate techniques for the development of a diverse vital community. Two students, for example, exhibit this sensitivity to community and diversity in the questions: "What is the best way of determining what is relevant to my students, especially if their backgrounds are different than mine or unfamiliar to me?", and "How can I make space for humanness in my classroom?" At the end of a discussion about community and the tension between accepting the "dominant discourse" and appreciating individual views, one student declares, "We can't survive as a community if we don't understand multiple viewpoints."

Figgins and her colleagues ask students to work together and to respond to each other's ideas and interpretations. For example, in "Teaching English," students exchange with fellow students their final projects developed in a prior course, "Linguistics for Teachers," for feedback and analysis. Students are asked to identify the material's three main strengths. Further, students are asked to identify areas for improvement: "If the unit were yours to revise, identify three to five things that you would do differently." Based on this feedback and feedback from the instructor, students then draft a tentative plan for revising the material. Their responses are to include the following information:

- What do I like most about this unit and want to retain?
- What are the key conceptual changes I would like to make?
- Based on my reading and class experiences to date in this course, what are some new contents and/or instructional strategies I would like to include, and where might I include them?
- What are three goals I would set for myself in creating a stronger unit, i.e., What planning skills do I want to improve upon?

In this way, students' texts are read with the same seriousness as other course texts. In the process, students have their work reflected back to them in ways which support further critique, insight, and revision.

For some graduates, the skills developed in the teacher education program with regard to participating in a supportive community extend into their classrooms and to their colleagues. Sometimes this engagement involves the University. Maria Morelli, for example, participates with Figgins, two other 1994 program graduates, and a doctoral student in an ongoing support/study group that explores successful practice. The purpose of this group, which meets once a month, is, according to Figgins, "to support each other in [our] attempts to interrogate and problem solve [our] own practice."

The UVA BA/MT secondary mathematics and English programs, both in structure and philosophy, require students to listen to each other and to practice the art of critical feedback while participating in a supportive community. Accepting the program culture, students see the advantages of working hard to offer suggestions and feedback to each other. The development of a supportive community would be impossible if students were unwilling to engage in such dialogue and to assume the responsibility for supporting each other's inquiry. In this regard Figgins observes, "If they [the students] didn't want to do this, it would be like driving with the brake on . . . Ultimately they learn to trust their knowledge, instincts, and intuitions."

Implications for Policy and Practice in Teacher Education

What, then, can be gleaned from this study of the English and mathematics teacher preparation programs at UVA? What are the implications for other institutions and for individuals who want to build learner-centered and learning-centered teacher education programs?

Perhaps the most important lesson to be taken from this case study of the BA/MT program of the Curry School of Education at the University of Virginia is that it is possible, indeed highly desirable, to combine academic and professional preparation in a teacher education program. With careful and thoughtful design, it is possible to build a powerful program that achieves high levels of knowledge in both pedagogy and content. In fact, at UVA, instructional strategy and technique are derived from content, as well as from generic methods courses. While some who reside in major research universities will argue that professional education and academic scholarship do not mix, the University of Virginia BA/MT program stands as proof to the contrary.

A second lesson is that the high quality of the UVA program demonstrates an important corollary to the lesson mentioned above—in combining the academic and the professional, neither set of standards must necessarily be compromised. The BA/MT program simultaneously maintains extraordinarily high subject matter rigor in the conventional academic courses while equipping teachers-in-training with a rich understanding of the complexities of classroom instruction.

Third, strong academic preparation need not cause students to lose sight of the fact that they are teaching children. Nearly every aspect of the BA/MT program is constructed with the intention of creating teachers who are learner- and learning-centered. As such, the program helps these prospective teachers gain important habits of mind and diverse perspectives that support effective, caring practice.

Fourth, the BA/MT program at the University of Virginia also sends an important message to the profession by conveying to its students, faculty, and affiliated practitioners that teaching is a noble profession. Graduates from this program are proud to be teachers—their commitments to the profession are strong; their pride in their practice is great.

Fifth, the program helps teachers recognize and honor the fact that teaching is not a rote activity. Through faculty modeling and student course work assignments, students come to understand the criticality of diagnosing student learning needs and tailoring instruction accordingly. The program further helps teachers think beyond their classrooms and to realize their potential to lead important education reform. As one faculty member commented, "Our job is to help students find the space where change is possible." Students emerge from teacher education at UVA expecting to assume leadership roles.

Sixth, the program clearly emphasizes reflection and inquiry. English and mathematics teachers who graduate from the BA/MT program develop the capacity to think about their instructional choices, consider alternatives, and be critical about their own practice.

Finally, the University of Virginia program demonstrates that a major research university and one of its professional schools can live peaceably and companionably together. One need not sacrifice anything for the other; their synergy creates a stronger whole.

REFERENCES

Kincaid, J. (1997). *Annie John.* New York: Noonday Press.

Watkins, Y. K., & Fritz, J. (1994). *So far from the bamboo grove.* Beechtree Books.

Myers, W. D. (1992). *Somewhere in the darkness.* New York: Scholastic Trade Publisher.

APPENDIX: METHODOLOGY

Data for this case study were gathered over a period of approximately one school year (1995-1996). Visits were made by the two principal researchers and a graduate student research assistant to the University of Virginia and the Charlottesville-area schools.

Data gathering employed both qualitative and quantitative approaches. Sources of data include:

- **Interviews**—Interviews were conducted with UVA education faculty members: those who are involved specifically in the preparation of English and mathematics secondary teachers as well as other faculty members from whom prospective English and math teachers take courses. Also interviewed were the current dean and the former dean of the Curry School, students in the English and mathematics programs, program graduates, graduate student supervisors, and personnel from local schools which traditionally employ UVA graduates.
- **Document Review**—Various written records were examined, including descriptive program information published by the university and by the school of education, education course syllabi, student transcripts, student papers and journals, and internal program analyses.
- **Observations**—Classes were observed at each of the area high schools which have employed UVA graduates in English and mathematics. University education classes were also observed.
- **Surveys**—For purposes of this study, surveys were conducted among a sample of recent UVA graduates (individuals who have been out of the program for two to three years) and among principals who have employed recent UVA graduates at their schools. Survey responses were tabulated and analyzed and some of the results are included in this case study.

This study focuses on English and mathematics in order to provide the reader with an in-depth perspective on the preparation of specific subject-matter teachers at the secondary level.

ABOUT THE AUTHORS

Julia E. Koppich is President of Julia E. Koppich and Associates, a San Francisco-based education consulting firm. She previously has been a classroom teacher, Staff Director for the San Francisco Federation of Teachers, on the faculty of the Graduate School of Education and Director of Policy Analysis for California Education (PACE) at University of California, Berkeley, and a Visiting Scholar at the Claremont Graduate School. Her areas of specialization include education policy analysis, teacher education and the teaching career, and public sector labor relations. She is the author of numerous articles and two books: *A Union of Professionals* (with Charles Kerchner) and *United Mind Workers: Unions and Teaching in the Knowledge Society* (with Charles Kerchner and Joseph Weeres).

Katherine K. Merseth is Executive Director of the university-wide Harvard Project on Schooling and Children and Founding Director of the Roderick MacDougall Center for Case Development and Teaching at Harvard University. She is a former dean for program development at Harvard Graduate School of Education. Merseth's research and writing focus on the extrinsic and intrinsic influences on educational practice. She is the author of *Case Studies in Educational Administration* and *Teacher Education: Text and Cases,* and also has written about mathematics instruction, teacher education, computer networks, and administrative leadership.

ABOUT THE EDITOR

Linda Darling-Hammond is currently Charles E. Ducommun Professor of Teaching and Teacher Education at Stanford University. Her research, teaching, and policy work focus on issues of school restructuring, teacher education, and educational equity. She is also executive director of the National Commission on Teaching & America's Future, a blue-ribbon panel whose 1996 report, What Matters Most: Teaching for America's Future, has been widely acclaimed as a major blueprint for transforming education so that all children are guaranteed access to high quality teaching.

Prior to her appointment at Stanford, Darling-Hammond was William F. Russell Professor in the Foundations of Education at Teachers College, Columbia University, where she was also Co-Director of the National Center for Restructuring Education, Schools, and Teaching (NCREST). Darling-Hammond is past president of the American Educational Research Association, a two-term member of the National Board for Professional Teaching Standards, and a member of the National Academy of Education and has served on many national advisory boards.

She is the author or editor of seven books, including *The Right to Learn: A Blueprint for Creating Schools that Work,* which was awarded the Outstanding Book Award from the American Educational Research Association in 1998, and more than 200 journal articles, book chapters, and monographs on issues of policy and practice. Among her other recent books are *Professional Development Schools: Schools for Developing a Profession, A License to Teach: Building a Profession for 21st Century Schools,* and *Authentic Assessment in Action.*

In 1996, the National Commission on Teaching and America's Future (NCTAF) undertook a research project to document teacher education programs that successfully prepare teachers to teach diverse learners to high standards. The study documented the successes and strategies of teacher education programs that have reputations for preparing teachers to teach in ways that are learner- and learning-centered; that is, they prepare teachers who are responsive to individual students' intelligences, talents, cultural backgrounds, needs, and interests. These programs also prepare teachers for understanding, teachers who support active in-depth learning for powerful thinking and flexible, proficient student performances. The study produced seven case studies that provide detailed descriptive evidence about the outcomes of the programs, the content they engage, and the processes they employ.

Those seven case studies are presented here. Edited by Linda Darling-Hammond, executive director of the National Commission, this three-volume series includes:

STUDIES OF EXCELLENCE IN TEACHER EDUCATION: PREPARATION AT THE GRADUATE LEVEL

Where There is Learning There is Hope: The Preparation of Preservice Teachers at Bank Street College of Education, *by Linda Darling-Hammond, Stanford University and Maritza B. Macdonald, Teachers College, Columbia University*

Knowing Children—Understanding Teaching: The Developmental Teacher Education Program at the University of California-Berkeley, *by Jon Snyder, University of California-Santa Barbara*

Knitting it All Together: Collaborative Teacher Education in Southern Maine, *by Betty Lou Whitford, Gordon Ruscoe, and Letitia Fickel, University of Louisville (KY)*

STUDIES OF EXCELLENCE IN TEACHER EDUCATION: PREPARATION IN A FIVE-YEAR PROGRAM

Teacher Education at the University of Virginia: A Study of English and Mathematics Preparation, *by Katherine K. Merseth, Harvard Project on Schooling and Children (Cambridge, MA) and Julia Koppich, Management Analysis and Planning Associates, San Francisco, (CA)*

Trinity University: Preparing Teachers for Tomorrow's Schools, *by Julia Koppich, Management Analysis and Planning Associates, San Francisco (CA)*

STUDIES OF EXCELLENCE IN TEACHER EDUCATION: PREPARATION IN THE UNDERGRADUATE YEARS

Ability-Based Teacher Education: Elementary Teacher Education at Alverno College, *by Kenneth Zeichner, University of Wisconsin-Madison*

Learning to Become a Teacher: The Wheelock Way, *by Lynne Miller and David Silvernail, University of Southern Maine*

AACTE

National Commission
on Teaching & America's Future

BEST COPY AVAILABLE

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

Reproduction Basis

☒ This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☐ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

EFF-089 (1/2003)